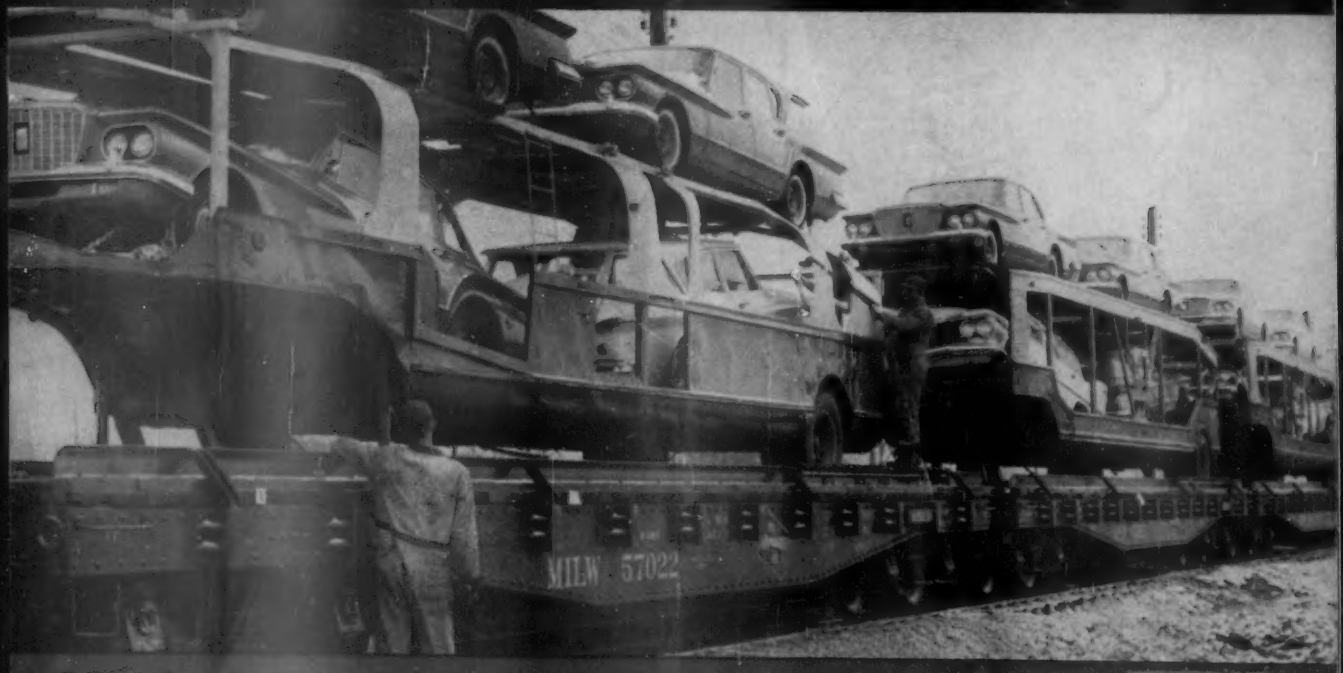
FREIGHT TRAFFIC ISSUE

What Shippers Can Do About Loss and Damage

March 28, 1960

# RAILWAY AGE *weekly*



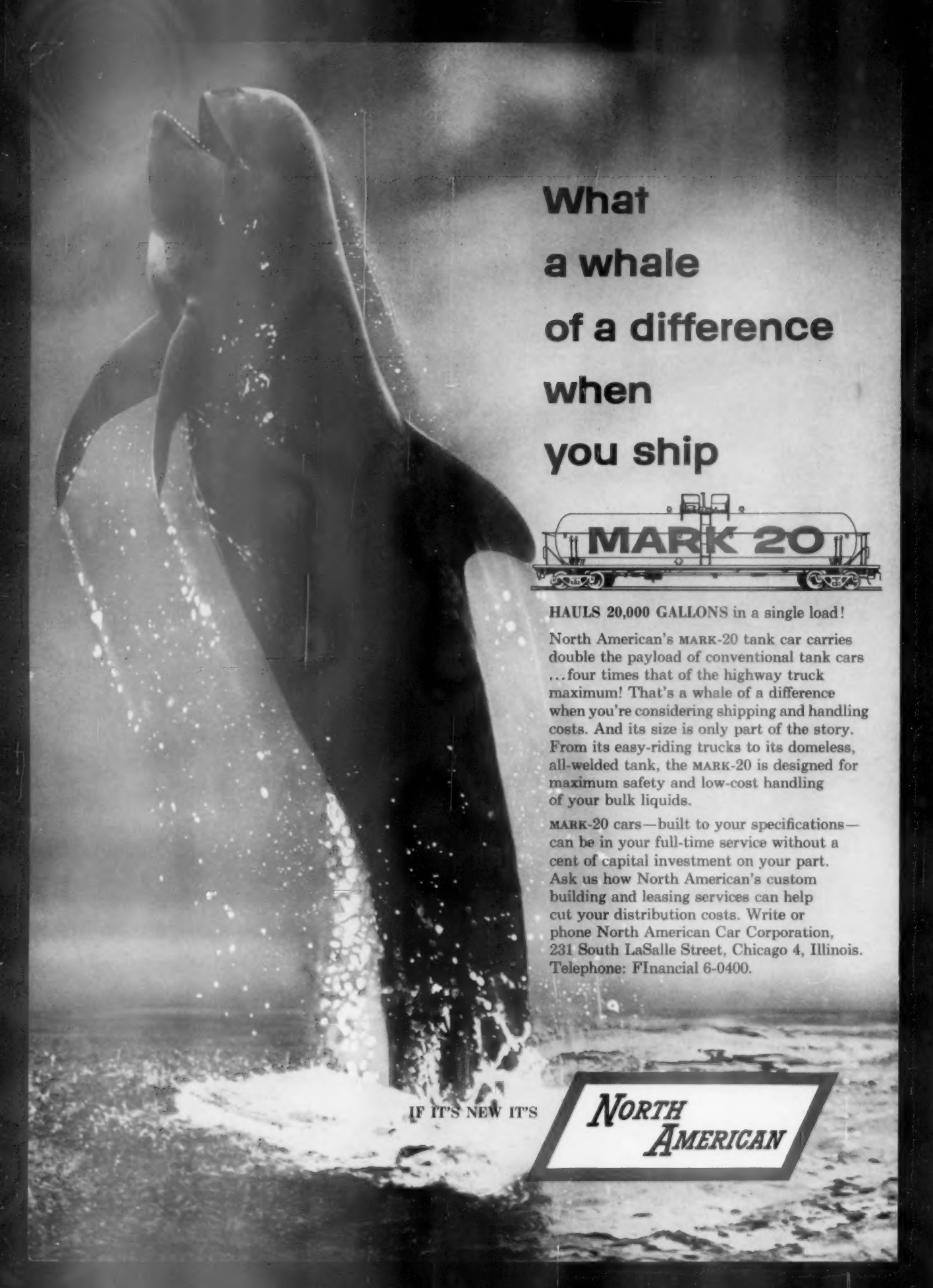

back lures autos back to rails—p. 49

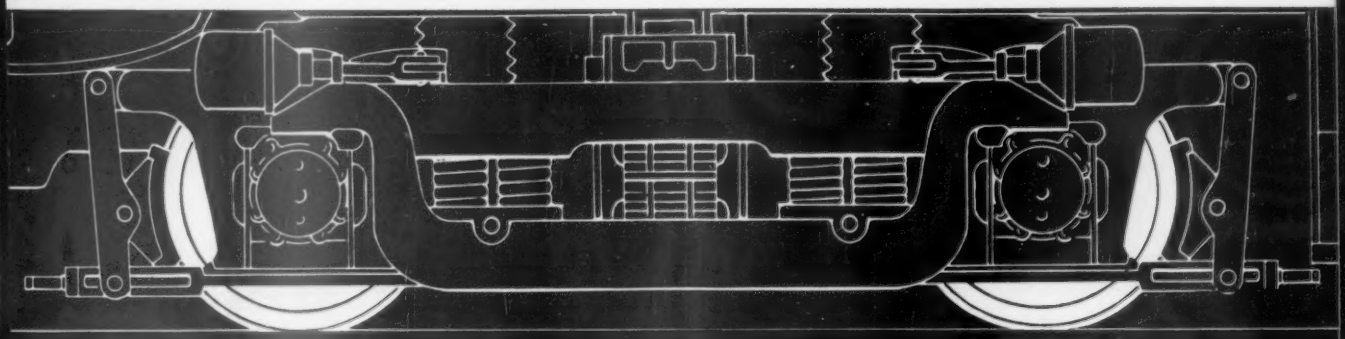
COMP
EDITORIAL DEPT
UNIV MICROFILMS INC
313 N FIRST ST
ANN ARBOR MICH

## Plan III TOFC

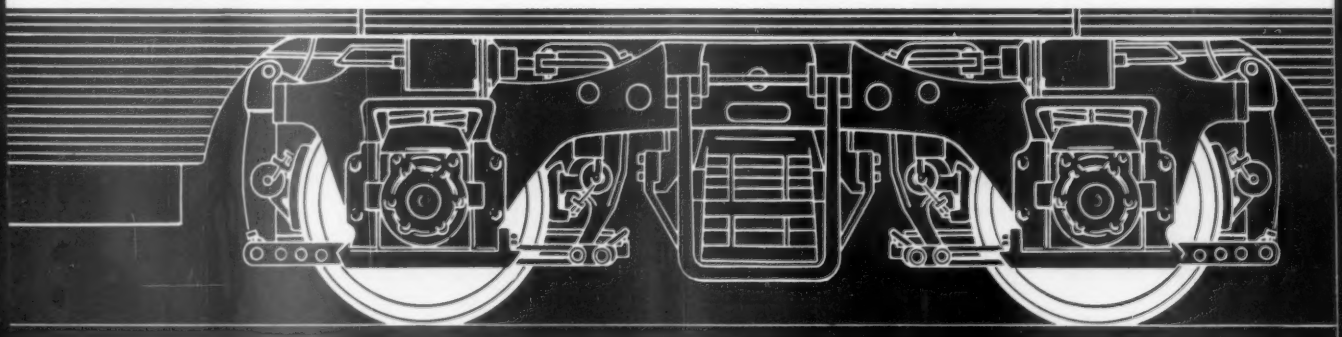
**Why Bristol-Myers likes it;**
**How it offsets private carriage**

60 cents A Simmons-Boardman TIME-SAVER Publication

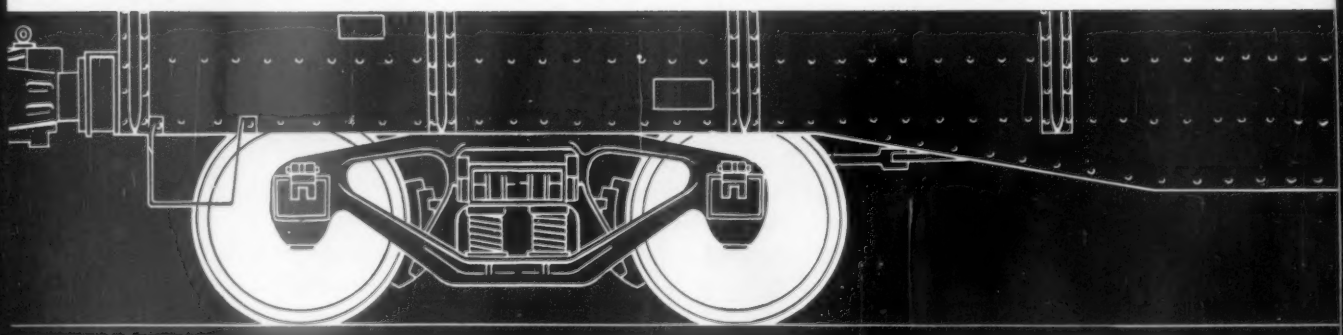

What
a whale
of a difference
when
you ship
MARK 20
HAULS 20,000 GALLONS in a single load!
North American's MARK-20 tank car carries double the payload of conventional tank cars ...four times that of the highway truck maximum! That's a whale of a difference when you're considering shipping and handling costs. And its size is only part of the story. From its easy-riding trucks to its domeless, all-welded tank, the MARK-20 is designed for maximum safety and low-cost handling of your bulk liquids.
MARK-20 cars—built to your specifications—can be in your full-time service without a cent of capital investment on your part. Ask us how North American's custom building and leasing services can help cut your distribution costs. Write or phone North American Car Corporation, 231 South LaSalle Street, Chicago 4, Illinois. Telephone: FInancial 6-0400.
IF IT'S NEW IT'S
NORTH AMERICAN



**DIESEL . . .**



**PASSENGER . . .**



**FREIGHT . . .**

## Bethlehem Wrought-Steel Wheels for all three

Each of these three kinds of wheels serves a different purpose under different conditions. But all have one thing in common—they're *wrought-steel* wheels, made by Bethlehem.

The wrought-steel wheel is a known value in railroading, a product that has measured up to every service requirement for over thirty years. During that time, railroads have purchased more than 2½ million Bethlehem wheels *for freight cars alone*. Mileages of 300,000 to 400,000 are common.

A record like that takes wheels that are strong and tough—the kind of wheel produced only by forging and rolling. For all three services—diesel, passenger, and freight—Bethlehem can furnish the finest in wrought-steel wheels, both one-wear and multiple-wear, either untreated or heat-treated. We'll be glad to quote on your needs.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.
*Export Distributor:* Bethlehem Steel Export Corporation

**BETHLEHEM STEEL**

BETHLEHEM STEEL

# "Railroads must mechanize to remain competitive"

*says Mr. E. Frederic Uhrbrock, Jr., Railroad Security Analyst, Bear, Stearns & Company*

Portrait by Editta Sherman

*"Full benefit of diesel operation cannot be realized without complete automation of yards and CTC installations. Modern tools are essential for profitable operation."*

This prominent analyst put his finger on the most important word in the future of the railroad industry—*automation*. It's the practical way that the industry can expand its operation, while it reduces operating costs.

Roads with CTC and automatic classification yards have reported a 30 to 40% return on their investment. Contact Union Switch & Signal for the latest facts on traffic control and classification yard systems.

*"Pioneers in Push-Button Science"*

**UNION SWITCH & SIGNAL**
DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY
SWISSVALE, PENNSYLVANIA
NEW YORK...PITTSBURGH...CHICAGO...SAN FRANCISCO

RAILWAY AGE *weekly* March 28, 1960 • Vol. 148, No. 13

## Week at a Glance

### Departments


| | |
|---|---|
| As the Publisher Sees It | 41 |
| Damage Reducer | 18 |
| Dividends Declared | 77 |
| Freight Carloadings | 75 |
| Freight Operating Statistics | 68 |
| Industrial Traffic | 76 |
| Letters from Readers | 38 |
| New Equipment | 75 |
| New Products Report | 66 |
| People in the News | 77 |
| Railroading After Hours | 60 |
| Railway Market | 75 |
| Shipper's Guide | 72 |
| Supply Trade | 77 |
| The Action Page | 82 |
| Traffic Poll | 17 |
| Watching Washington | 10 |
| You Ought to Know | 80 |



• Editorial and Executive Offices New York 7, 30 Church St.

JAMES G. LYNE, Editor
ROBERT G. LEWIS, Publisher
Executive Editor .... Joe W. Kizzia
Managing Editor .... Fred C. Miles
News Editor ..... Luther S. Miller
Traffic-Transportation .. G. C. Hudson
Mechanical
C. L. Combes F. N. Houser, Jr.
Signaling & Communications
Robert W. McKnight Robert J. Barber
Associate Editors
Rod Craib Harry M. Grayson, Jr.
Librarian ..... Edith C. Stone
Editorial Assistant .... June Meyer
Art Director..... Russell F. Rypsam
Design and Layout .. Joel Petrower
Production Manager..Joseph J. Menkes

• Chicago 3, 79 West Monroe St.
Western Editor ..... Gus Welty
Regional News.....William V. Tuite
Mechanical .... Norman E. Gillespie
Engineering ..... M. H. Dick
R. E. Dove E. W. Hodgkins, Jr.
Purchasing & Stores ..... Bert Enos
Editorial Assistant .. Wanda Brown

• Washington 4, National Press Bldg.
Washington Editor .. Walter J. Taft

Railway Age, established in 1856, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.

Published weekly by the Simmons-Boardman Publishing Corporation at 440 Boston Post Road, Orange, Conn. Second-class postage paid at the Post Office at Orange, Conn. James G. Lyne, chairman of the board; Arthur J. McGinnis, president and treasurer; Duane C. Salisbury, executive vice-president; George Dusenbury, vice-president and editorial and promotion director; Robert G. Lewis, Joe W. Kizzia, M. H. Dick, M. J. Figa, R. C. Van Ness, vice-presidents.



**GN plans 110-mile pipeline** ..... p. 9

The proposed line would link crude oil producing areas with the road's main line near Minot, N. D. If the North Dakota PSC approves, Great Northern will become the third railroad to branch into the pipeline field.

**Cover Story—How shippers can cut L&D** ..... p.17

There are nearly as many ideas as there are shippers on how to solve this joint industry-carrier problem. But there's a good measure of agreement on nine fields where shippers can help substantially.

**Cover Story—Why Bristol-Myers likes Plan III** ..... p.24

That type of piggyback gives shippers "many of the service benefits of private carriage" while allowing them to stay out of the transportation field, says the company's director of traffic. There's plenty of evidence on the value of Plan III to both shippers and railroads.

**Cover Story—TOFC lures autos back to rails** ..... p.49

Four automobile traffic men tell Railway Age how they use piggyback, why they like it, and what they think of its future.

**Railroads can regain steel traffic** ..... p.54

To do so, P&WV President Shields tells Railway Age, they must provide specialized equipment, dependable service, and rates which will give shippers a lower overall cost than is available by highway.

**What's what in piggyback** ..... p.74

Confused by the different "plans" of piggyback service? Look at the capsule definitions on page 74, arranged to be easily clipped and kept for future reference.

**Tidepower positions new PRR span** ..... p.78

The Pennsylvania harnessed the tides to float a new 542-ft span into place on its Delair Bridge, and to float away the old span. Here's the story in pictures.

**The Action Page—'Let's not get well too fast'** ..... p.82

The current national Administration — which has let no grass grow under its feet in building highways, seaways or airports—seems determined to follow a "slow-motion" policy when it comes to any action which might help railroads.

# It is friction plus rubber for highest capacity* of any...

## standard pocket draft gear...for smoothness and lading protection

## WAUGH-GOULD TYPE 700 FRICTION-RUBBER DRAFT GEAR

**WAUGH EQUIPMENT COMPANY**

NEW YORK • CHICAGO • ST. LOUIS

Canadian Waugh Equipment Company: Montreal

*Certified under A.A.R. Specification M-901-53, Waugh-Gould Type 700 Draft Gear has an official average capacity of 51,600 ft. lbs. at 2.62" average gear closure with average reaction of 1,006,200 lbs. Half travel capacity, 10,640 ft. lbs. or 20.6% of capacity at full travel.

## Week at a Glance cont'd

## Current Statistics

| | |
|---|---|
| **Operating revenues** | |
| 1 mo., 1960 .... | $789,265,270 |
| 1 mo., 1959 .... | 784,161,653 |
| **Operating expenses** | |
| 1 mo., 1960 .... | 633,867,856 |
| 1 mo , 1959 .... | 644,544,329 |
| **Taxes** | |
| 1 mo., 1960 .... | 84,362,913 |
| 1 mo., 1959 .... | 78,905,591 |
| **Net railway operating income** | |
| 1 mo., 1960 .... | 43,566,271 |
| 1 mo., 1959 .... | 36,093,881 |
| **Net income estimated** | |
| 1 mo., 1960 .... | 30,000,000 |
| 1 mo., 1959 .... | 21,000,000 |
| **Average price railroad stocks** | |
| Mar. 22, 1960 .. | 95.26 |
| Mar. 24, 1959 .. | 108.10 |
| **Carloadings, revenue freight** | |
| 10 wks., 1960 ... | 5,797,162 |
| 10 wks., 1959 ... | 5,758,884 |
| **Freight cars on order** | |
| March 1, 1960 .. | 46,323 |
| March 1, 1959 .. | 28,789 |
| **Freight cars delivered** | |
| 2 mos., 1960 .... | 7,900 |
| 2 mos , 1959 .... | 4,426 |


**Advertising Sales Department**

**Duane** C. Salisbury—director of sales
**New York** 7, N. Y., 30 Church st., WOrth 4-3060
J. S. Vreeland—vice president
F. T. Baker—district manager
J. C. Lyddy—district manager
**Chicago** 3, Ill., 79 W. Monroe st., RAndolph 6-0794
J. R. Thompson—vice president
J. W. Crossett—district manager
Hale Carey
**Cleveland** 15, Ohio, 1501 Euclid ave., MAin 1-4455
H. H. Melville—vice president
H. M. Blunt—district manager
**Pittsburgh** 19, Pa., Suite 203, Carlton House GRant 1-8186
C. J. Fisher—district manager
**Atlanta** 9, Ga., 22 Eighth st., N. E., TRinity 2-6720—J. S. Crane
**Dallas** 19, Tex., 3908 Lemmon ave., LAkeside 1-2322—Joseph Sanders
**Los Angeles** 17, Cal., 1336 Wilshire blvd., HUbbard 3-0390
Bayne A. Sparks—vice president
**San Francisco** 11, Cal., 244 California st., EXbrook 7-4990
D. S. Clark—district manager
**London** E.C. 1, Eng., 8/9 Clerkenwell Green Sibley-Field Publishing Co., Ltd.
**Frankfort am Main** (16), West Germany Wittelsbacher Allee 60
Georg J. Linder,
**Tokyo,** Japan
Shadan Hojin, 14
2-Chome Marunouchi
George E. Olcott

Subscription to railroad employees only in U.S. possessions, Canada and Mexico, $4 one year, $6 two years, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year. In other countries, $15 a year. Single copies 60c except special issues. Address all subscriptions, changes of address, and correspondence concerning them to: Subscription Dept., Railway Age, Emmett St., Bristol, Conn.

Change of address should reach us three weeks in advance of next issue date. Send old address with new, enclosing, if possible, your address label. Post Office will not forward copies unless you provide extra postage.

Circulation Dept.: R. C. Van Ness, Director of Circulation, 30 Church St., New York 7, N. Y.

POSTMASTER—SEND FORM 3579 to EMMETT ST., BRISTOL, CONN.

Printed at the Wilson H. Lee Co., Orange, Conn.


Latest evidence to that effect is the apparent determination to shelve the Commerce Department's Transportation Policy report for future action—maybe—by someone, sometime.

### *Short and Significant*

**A 3,044-car reduction . . .**

in serviceable fleets of Class I railroads and their car-line affiliates was recorded in February. The loss resulted principally from an increase in the bad-order backlog. The decline in total ownership was only 749 cars, i.e., 4,419 new cars were installed in February while 5,168 were retired.

**Trailer Train's 24th railroad member . . .**

is the Richmond, Fredericksburg & Potomac. A spokesman said RF&P joined the TOFC equipment pool "so we can better participate in interline piggyback movements between the South and the Middle Atlantic seaboard" and also expand on-line TOFC service.

**Rubber dunnage is being returned free . . .**

by Eastern railroads. The return move is by LCL freight, over the reverse of the route traveled by a revenue shipment. It applies within Official Territory to dunnage bags furnished and installed by the shipper at his own expense, and delivered to the first returning carrier by the receiver. The ruling—though a few "kinks" remain to be ironed out—became effective March 16.

**Public relations director of PRR . . .**

has resigned effective April 1. Vice President Ralph C. Champlin, who joined PRR in 1951, has not announced his future plans. The road will merge its public and employee relations departments. James W. Oram, vice president—personnel, will head the combined setup. Organization of the new department has not been completed.

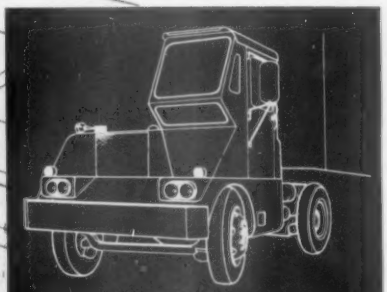
**Tank-type aluminum covered hopper cars . . .**

have been ordered by Canadian National and Roberval & Saguenay. Designed by Aluminum Company of Canada, the tank-shaped body eliminates side posts, crossbearers, and a portion of the center sill between bolsters. Discharge gates will be on car center line. Marine Industries will build two experimental cars for each road. Estimated light weight of the 3,000-cu ft car is 31,000 lb.

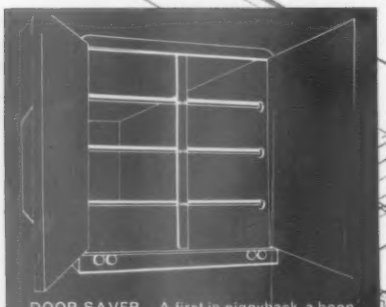
**Hearings on the IC-SP application . . .**

to the ICC for authority to acquire a barge line—the John I. Hay Co.—will be moved to St. Louis May 23. Opening hearings in Washington ended last week after presentations were received from the two railroads and their supporters.

# 3 GIANT STEPS...



COMMANDO Rail-ER. Now available from Rail-Trailer. The new piggyback trailer handling unit developed by Ottawa Steel Division and R-T. **Offers double the performance of present equipment.**



DOOR-SAVER. A first in piggyback, a boon to the entire trucking industry . . . from Rail-Trailer. Scheduled for early '60 production, "Door-Saver" **will end trailer door damage from cargo movement!**

ASF HYDRA-LIFT*. The advanced 5th wheel by Rail-Trailer is now universally performing **more efficient piggyback carloading and trailer spotting.**

*The trademark "Hydra-Lift" is the property of American Steel Foundries.

# by the "Pioneer in Piggyback"

**Major advances from Rail-Trailer.** When the topic is modern piggyback, you hear "Rail-Trailer" more than ever. First case in point—the widely accepted Hydra-Lift 5th Wheel that won't raise or lower accidentally. Years in development by R-T, Hydra-Lift is a significant contribution to faster and safer piggyback terminal operation.

*Another giant step forward by the "Pioneer" is now in use; the new Commando Rail-ER* . . . a highly specialized tractor with one mission—swift piggyback terminal trailer movement. Developed through the engineering coordination of Ottawa Steel Division and Rail-Trailer, Commando Rail-ER features torque conversion to eliminate damage from trailer slamming or jack rabbit starts. Commando Rail-ER is now universally available to piggyback from R-T.

*A development of vast importance to piggyback is the R-T Door-Saver*, which will make the problem of damage to doors through cargo shift a thing of the past!

These latest technological giant steps are but one facet of the ever-expanding Rail-Trailer services to the piggyback industry. When your firm contemplates the economies of piggyback, (including large-scale piggyback terminal operation), we urge that you communicate with the seasoned staff of . . .

*Rail-Trailer*®

221 N. LaSalle Street

Chicago 1, Illinois

# GN Plans 110-Mile Pipeline

**► The Story at a Glance: Diversification into the pipeline field attracted a third railroad last week: Great Northern is applying for authority to build a 110-mile line in North Dakota to link producing areas with the GN main line near Minot.**

**Meanwhile, three roads acted last week to offset the expected effects of construction of an LPG pipeline by an affiliate of the Katy. Their action: A proposed rate cut designed to keep rail transportation competitive with the pipeline, due to be completed this year.**

Sometime later this year, Great Northern hopes to begin construction of a 110-mile crude oil pipeline linking the Lignite and Newburg fields with the railroad's transcontinental main line near Minot. If the North Dakota Public Service Commission approves the application, GN will become the third railroad to broaden its operations into the pipeline field (joining Southern Pacific, which has lines into Arizona and Nevada currently in operation; and Katy, which is planning construction of a 1,749-mile line from producing areas in the Southwest to points in the upper Midwest).

Action by GN caps a four-year study on feasibility of pipeline transportation of crude out of a part of the Williston Basin. The 110-mile line will cost about $3,500,000. Great Northern views it as "the first phase of an installation extending to the Twin Cities and Duluth-Superior markets."

Thus far, there's no estimate of the volume which the initial segment of line may develop. But GN says it has assurances from producers that the line will be used by crude oil shippers in the two fields.

Plans call for construction of about 30 miles of line along railroad right-of-way (including more than 12 miles to be built along the recently-opened GN line to the Minot Air Force base).

Proposed rate schedules, the road indicated, are in process of development (as are certain physical features of the project, among them the size of line to be constructed).

While GN was moving ahead with its pipeline plans, other carriers were acting to offset expected competitive effects of the proposed Katy pipeline into Wisconsin and Minnesota.

Texas & Pacific announced a reduction of 10 cents per 100 lb in rates on LPG from Texas producing points to midwestern territories. Missouri Pacific and Rock Island concurred in the cuts. And, T&P said, "other midwestern railroads [will] undoubtedly follow suit, thus extending the reduction to practically all points in . . . Kansas, Nebraska, Iowa, Wisconsin, Minnesota and the Dakotas."

Initial cuts, T&P indicated, would lower rates by one-half cent per gallon to such points as McPherson, Kan.; Kansas City, Mo.; Lincoln and Omaha, Neb.; Ottumwa, Iowa; and Minneapolis-St. Paul, Minn.

T&P pointed out that the reduction "follows closely an increase of one cent per mile in the allowance for tank cars which will become effective May 1 . . . and principal shippers of liquified petroleum gas say that it will largely wipe out any advantages that might have been claimed for a . . . pipeline which the Katy . . . has had under consideration."

Cost of the Katy line—officially the Mid-America Pipeline—is estimated at about $71,600,000. It would run from Eunice, N. Mex., through Texas and Oklahoma to McPherson, Kan., then forking to the Madison-Milwaukee and the Minneapolis-St. Paul areas.

The line is scheduled to be in operation by the end of 1960. As of March 14, over 400 miles of right of way had already been acquired. Orders for pipe have been placed.

A dozen or more major shippers have reportedly indicated interest in using the Katy line.

Rates into the Twin Cities would run about half the cost of rail shipment. For example, the rate on propane from Pampa, Tex., to St. Paul would be 80 cents per barrel, compared to current rail rates of $1.68. The saving: about two cents per gallon.

Meanwhile, SP reports that the fourth year of the operation of its pipeline was the best to date. SP says that deliveries of refined products increased 28%. The pipeline system's net income of $4,510,566 constituted a rise of 31%.

## Reduced Rates on Refractories?

A proposed new scale of rates on refractories within Official Territory, and embracing the area as far west as Mexico, Mo., has been announced by Eastern District railroads.

The proposed scale is set up on a mileage basis. It would replace existing scales, some of which group both origins and destinations. On the average, the proposal represents substantial reductions under existing rates.

The new scale would establish alternate minima (60,000 lb and 80,000 lb), with further discounts for tonnage over 80,000 lb.

On a minimum of 80,000 lb, charges are proposed to range from $3.40 per net ton at 100 miles, to $7.80 at 500 miles, and $12.20 at 1,000 miles.

These rate proposals are the latest to result from the Eastern railroads' research studies of specific commodity movements. Earlier studies, which produced revised rates now in effect, included paint and synthetic rubber.

ICC commodity statistics report approximately 46,000 carloads of refractories originated in the U.S. in 1958 (latest figures). Major origin points for this traffic are in the area embraced by the proposed new rates.

# C&NW, Soo Plan Ore Rate Cuts

Chicago & North Western and Soo Line have agreed on a principle—but not the specific method—for helping to keep upper Michigan and Wisconsin iron ore producers in business.

In past years, most of the ore from the Gogebic range has moved via rail to Ashland, Wis., and on to Chicago or lower lake ports by ship. But rail rate cuts now scheduled to go into effect in April may change that pattern and throw the business to Escanaba, Mich.

Both roads filed for rate cuts on short notice, which would have placed reductions in effect March 24, instead of early in April under statutory notice. But the city of Ashland protested (an action aimed at the C&NW rate to Escanaba) and the Interstate Commerce Commission suspended the short notice filing. North Western, however, indicated it would file last Thursday for the suspension to be lifted because the first ore boats are reported due in Escanaba for loading early this week.

Ashland's protest doesn't dispute rate cuts to help the Gogebic. But it's reported to protest C&NW's action as discriminatory because the road didn't also reduce its rates via Ashland. C&NW proposes to cut its rate from the Gogebic to Escanaba by 55 cents, from $2.00 to $1.45 per ton. Soo Line responded by proposing to reduce its rate from the range to Ashland by 38 cents, from $1.25 to 87 cents per ton. The producing area ships 3,000,000 to 4,000,000 tons per year, and may top 4,000,000 during the coming season.

### *Import Ore Poses Threat*

Both new rates stem from the producers' plea for help in fighting the competition of import ore. Studies were made by the carriers—but apparently they led to different conclusions. C&NW says no significant savings would be possible in handling ore through Ashland. But the road did find a lower rate possible via Escanaba, provided the mining companies absorb certain switching costs previously borne by the railroad. North Western announced a rate cut to the Lake Michigan port—and Soo Line, also eliminating certain switching services, responded by slashing the rate to Ashland.

Complicating the rate and traffic picture is a pooling agreement by which C&NW (69%) and Soo Line (31%) have shared the tonnage moving off Gogebic. If the rate cuts become effective, modification of the pool arrangement may be required.

North Western says producers will now realize a saving of 22 cents a ton on rail and boat costs via Escanaba to the Chicago district. Turn-around time for ore boats will also be reduced, the road points out, since the Escanaba-Chicago round trip is about 1,000 miles shorter than the Ashland-Chicago swing.

*(Continued on page 41)*

## Watching Washington *with Walter Taft*

• **NEARLY $12 BILLION** will be spent this year on domestic transport facilities by federal, state and local governments. That will bring to $161.9 billion the cumulative government outlays for construction, operation and maintenance of highway, waterway and airway facilities.

**THIS IS SHOWN** by an AAR compilation which is timely in view of the transportation report recently submitted to President Eisenhower by Secretary of Commerce Mueller (RA, Mar. 21, p. 31). Among that report's recommendations are its calls for user charges on publicly-provided transport facilities and establishment of a transport investment planning staff in the Department of Commerce.

**FIGURES** in the AAR compilation are conservative because they do not include all state and local expenditures. No data on state and local outlays for waterways are available, while state and local expenditures for airports have not been available since 1955.

**THE TOTALS INCLUDE** expenditures on Great Lakes and coastal harbors as well as on inland and intracoastal waterways. Also, they include the domestic airmail subsidy, which is expected to be at its peak, $54,430,000, for this year. This will bring the cumulative total of these subsidies to $580,909,000.

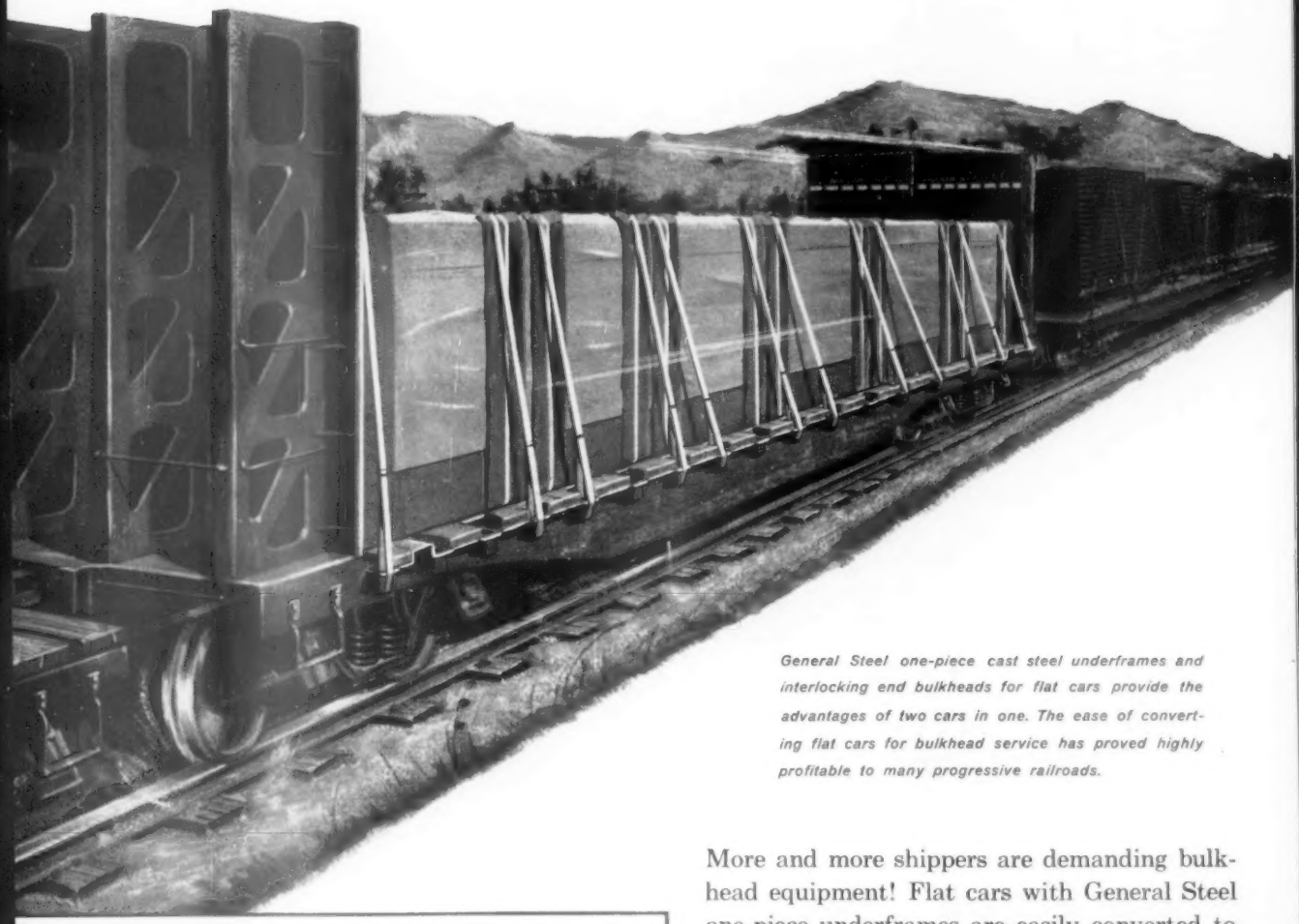
**NOT INCLUDED** are expenditures for the merchant marine, and Coast Guard expenditures identified as outlays for "navigation aids and facilities" or "promotion of water transportation." This Coast Guard spending is expected to total $276,000,000 for 1960, and its cumulative total is $5.1 billion.

**BIGGEST OUTLAY,** of course, is for highways—estimated at nearly $11 billion for 1960. Here the cumulative total is $149.3 billion, including $124.4 billion spent by state and local governments and $24.9 billion by the federal government.

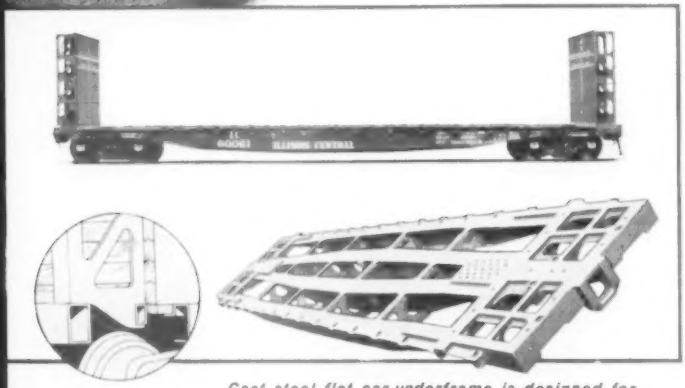
**NEXT COME AIRWAYS.** This year's expenditures on the Federal Airway System are expected to be about $459 million, bringing to $2.5 billion the amount spent on these facilities since they were established. Making grants-in-aid for airport construction, the federal government has spent a total of $2¼ billion, including an estimated $75 million for this year.

**ON WATERWAYS,** an estimated $301 million will be spent this year. It will push the cumulative total of such expenditures across the $5 billion mark—to $5,163,500,000. Construction costs in these totals do not include expenditures for navigation portions of so-called multi-purpose waterway projects.

*. . . where railroad progress is cast in steel*



*General Steel one-piece cast steel underframes and interlocking end bulkheads for flat cars provide the advantages of two cars in one. The ease of converting flat cars for bulkhead service has proved highly profitable to many progressive railroads.*



*Cast steel flat car underframe is designed for quick, low cost application of upright ends.*

More and more shippers are demanding bulkhead equipment! Flat cars with General Steel one-piece underframes are easily converted to bulkhead cars by the application of cast steel upright ends. In all General Steel underframes, the metal is properly distributed where it is needed for strength, and the *extra* strength required for use with end bulkheads is provided as a built-in advantage. The cast steel end posts are easy to apply, permit maximum loading space.

General Steel flat car underframes assure longest life, lowest maintenance costs and greatest availability of equipment. They're your best investment, by far.

# GENERAL STEEL CASTINGS

GRANITE CITY, ILL. · EDDYSTONE, PA. · AVONMORE, PA.

DEDICATED TO PROGRESS
RPI MEMBER

Yours,
for PERFECT
SHIPPING
D & R G W
Rio Grande
69602
Rio Grande
The
Shippers' Railroad
Traffic Offices
in 38 Cities
"It's Easy To Do Business With Us"
DENVER & RIO GRANDE WESTERN RAILROAD
R. KNOX BRADFORD, Vice President-Traffic • Rio Grande Building • Denver, Colorado
MAIN LINE
Rio Grande

lc
USR

US RUBBER

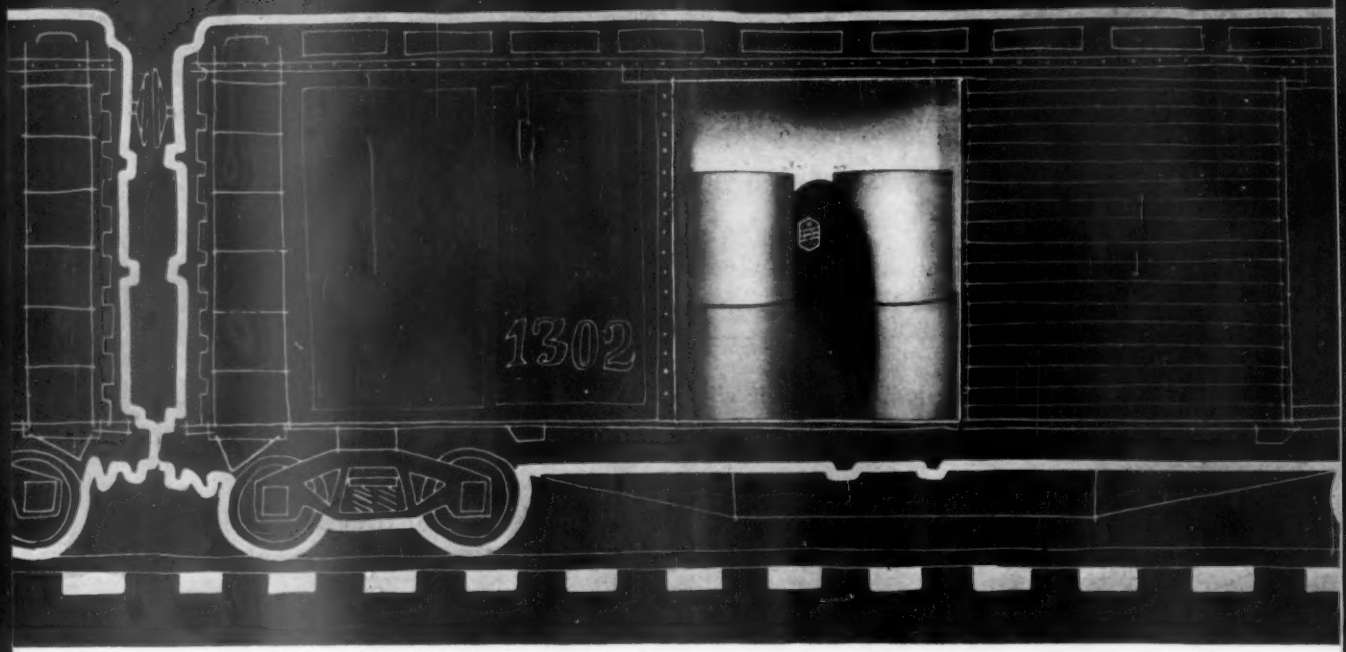
# SHOR KWIK

## INFLATABLE DUNNAGE

Important facts about SHOR-KWIK

the proven inflatable dunnage

developed by U.S. RUBBER!




## HUNDREDS OF SATISFIED RAILROAD SHIPPERS SAVE WITH SHOR-KWIK

Cleveland Heater Co.
Coleman Co.
General Electric Co.
O. A. Sutton
Western Electric

Fisher Body
Ford Motor Co.
General Motors
Western Auto Supply

Aborigine Lumber Co.
Arcata Plywood
Arkatex Ceramic Corp.
Bestwall Gypsum Co.
Bird & Son
Campbell-McLean
Cascades Plywood Corp.
Corvallis Plywood Co.
Diamond Gardner Corp.
Eugene Stud and Veneer Co.
Flintkote Co.
General Plywood Corp.
General Shale Products
Gladding McBean & Co.
Grace Bros. Ltd.
Hyde-Murphy Co.
Johns-Manville
Kaiser Gypsum
Martin Bros. Container & Timber
Masonite
Menasha Plywood Co.
Merry Bros. Brick & Tile
Mt. Baker Plywood
National Gypsum Co.
Nickey Bros.
Peninsula Plywood
Plywood Mfgrs. of California
Plywood Products Corp.
Port of Longview
Potlatch Forests, Inc.
Ruberoid Co.
Roddiscraft
Sierra Talc & Clay Co.
Southern Clay, Inc.
St. Paul & Tacoma Lumber Co.
Timber Products Co.
Umpqua Plywood
U. S. Gypsum Co.
U. S. Plywood Corp.
White Pine Sash Co.

US RUBBER

# SHOR KWIK INFLATABLE DUNNAGE

## 3 years of actual railroad use prove SHOR-KWIK'S advantages to railroads and shippers alike

**1.** Tough, rubber-nylon inflatable Shor-Kwik holds cargo firmly, safely in place...absorbs rough impact... cuts cost of damage claims!

**2.** Easy-to-handle Shor-Kwik speeds shoring... cuts unloading time... assures faster turnaround...saves costly man-hours and demurrage charges!

**3.** Economical Shor-Kwik eliminates cost of non-reusable shoring...can be reused for years...is easy to return and store!

**4.** The 14 U.S. Rubber field representatives at your disposal help solve traffic problems...help put Shor-Kwik to the best, most economical use!

**SATISFIED RAIL SHIPPERS (continued):**

Wood Conversion Co.

Ansul Chemical Co.
Bakelite Co.
Cabot Carbon
Cities Service Oil Co.
Continental Carbon Co.
DuPont
Monsanto
National Carbide
Shell Chemical Corp.
Standard Oil of California
Union Oil Center
Witco Chemical Co.

American Chicle Co.
American Sugar Refining
C & H Sugar
Exchange Orange Products
General Foods Corp.
Hershey Chocolate
Geo. A. Hormel & Co.
Nestles Chocolate
Pillsbury Mills
Pluss Poultry, Inc.
The Quaker Oats Co.
Queen City Brewing Co.

Englander Company
General Fireproofing Co.
Globe Wernicke
International Business Machines
Security Steel Equipment Co.

U. S. Naval Supply Depot
U. S. Navy Purchasing

Aluminum Company of America
American Can Co.
American Steel & Wire

National Malleable Steel & Castings
Signode Steel Strapping
U. S. Steel Homes
U. S. Steel Products
Thomas Laughlin Co.

Abercorn Aero, Ltd.

lc
USR

# Specifications for inflatable, returnable, reusable SHOR-KWIK dunnage

A B C D E F G

| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| INFLATOR GAUGE PE-A-5208 | PE-D-2048 | PE-D-2004 | PE-D-2037 | PE-D-2031 | 839 | PART NO. 836 | PE-D-2014 |
| | 4′ x 9′ 48 lbs. | 4′ x 8′ 42 lbs. | 4′ x 7′ 37 lbs. | 4′ x 6′ 32 lbs. | 4′ x 5′ 26 lbs. | 4′ x 4′ 22 lbs. | 32″ x 48″ 16 lbs. |

WEIGHTS SHOWN ARE APPROX.

**See following page for information about Shor-Kwik's successful use in piggy-back operations.**

For prices and technical information, write, wire or phone United States Rubber, Providence 1, Rhode Island, DE 1-4000.

**SATISFIED RAIL SHIPPERS (continued):**

Air Freight Clearings, Inc.
Alco-Gravure
American Car & Foundry
American Tobacco Co.
Black Bros.
Brown Co.
Chesebrough-Ponds
Eastwood Neally
Emery Industries
Firestone Industrial Products
Friedman's Express
Industrial Rayon
S. C. Johnson & Son
Liberty Motor Freight
Lloyd's Little Acres
Loading Service Corp.
Marison Co.
Mutual Products Co.
North American Aviation
Owens-Illinois Glass Co.
Packard Bell
Rheem Manufacturing Co.
R & S Supply
F. E. Schundler & Co.
Simoniz Co.
Charles Taylor's Sons
Timber Engineering
Union Starch & Refining

Albemarle Paper Mfg. Co.
American Boxboard
American Container
Beckett Paper Co.
Bemis Bros. Bags
Buckeye Cellulose Corp.
Central Fiber Products Co.
Champion Paper & Fibre Co
Chase Bag Co.
Chillicothe Paper Co.
Container Corp. of America
Continental Can Co.
Coos Bay Timber Co.
Cornell Paperboard
Crocker-Burbank
Crossett Paper Mills
Crown-Zellerbach
East Texas Pulp & Paper
Ecusta Paper Co.

US RUBBER

# SHOR KWIK

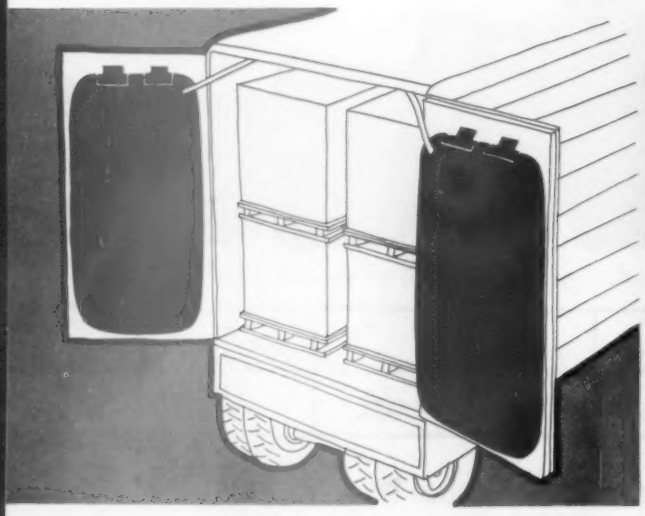
INFLATABLE DUNNAGE

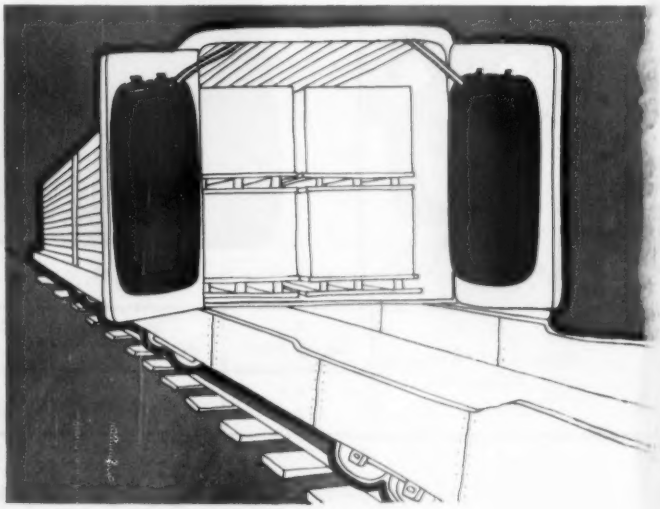
## SHOR-KWIK is made to order for Piggy-back operations

Whatever the size of the trailer trucks... whatever the size of the operation... U.S. Rubber will manufacture Shor-Kwik inflatable dunnage to meet exact specifications.

On piggy-backs, just as in freight cars, Shor-Kwik has proved to be a most valuable cargo-saving, time-saving asset. Shippers who are using it report in-transit damage claims cut to record lows.

Write, wire or phone for prices and technical information on piggy-back shipping problems. United States Rubber, Providence 1, Rhode Island, DE 1-4000.





US RUBBER **United States Rubber**

**SATISFIED RAIL SHIPPERS (continued):**

Fibreboard Paper Products
Fitchburg Paper Co.
Fraser Paper Ltd.
Gardner Board & Carton Co.
Gaylord Container
Georgia-Pacific Paper Co.
P. H. Glatfelter
Graham Paper Co.
Hercules Powder
Hinde & Dauch
Hoerner Boxes, Inc.
Hollingsworth & Whitney
Hudson Pulp & Paper
International Paper Co.
Kieckhefer-Eddy
Kimberly-Clark Corp.
Laird Box & Paper
Longview Fibre Co.
Lord Baltimore Press
Lowe Paper Co.
Marathon Corp.
Minnesota & Ontario Paper Co.
Munising Paper Co.
Nekoosa-Edwards Paper Co.
New Haven Board & Carton
North Carolina Pulp Co.
Oxford Paper Co.
Puget Sound Pulp & Timber
Rhinelander Paper Co.
R-W Paper Co.
Schmidt & Ault Paper Co.
Seaboard Bag Corp.
Sealright
Solo Cup Co.
Specialty Papers Co.
Stone Container Corp.
St. Regis Paper Co.
Waldorf Paper Products
West Virginia Pulp & Paper Co.
Western Kraft Corp.
Weyerhaeuser Timber Co.
Whippany Paperboard Co., Inc.

Chesapeake & Ohio
Great Northern Railway
New York Central
New York, Chicago & St. Louis R.R. Co.
Norfolk & Western Railway

# How Shippers Can Cut L&D

## Proposition

**Nearly everyone, probably, agrees that prevention of loss and damage to freight should be a cooperative effort between shippers and carriers. Previous Traffic Polls have dealt with the carrier's responsibility. This one approaches the problem from the opposite angle, i.e., what can shippers do to help reduce loss and damage?**

## Question

**What can I, as a buyer and user of transportation, do to help cut down loss and damage to freight?**

**Here—condensed, summarized and grouped — are the most frequently mentioned methods:**

**1) Use proper equipment, or special equipment now available, i.e., device cars, rubber dunnage, etc.**

**2) Follow up, fast, with carriers, suppliers or customers when damage occurs.**

**3) Use proper packaging.**

**4) Use legible markings.**

**5) Follow AAR loading rules.**

**6) Provide better supervision of shipping operations.**

**7) Keep the subject under constant study.**

**8) Use photographs—of good loads for training, and of damaged loads for analysis.**

**9) Stop using carriers with poor damage records.**

What can shippers do to help reduce loss and damage to freight?

There are, this month's Poll indicates, almost as many opinions as there are shippers—with, however, a large measure of agreement on nine ways in which industry can help solve what nearly all respondents concede to be a joint shipper-carrier problem.

Here are the nine, in order of frequency of mention:

1) *Use proper equipment, or special equipment now available, i.e., device cars, rubber dunnage, etc.* "Keep insisting on equipment that will do the job right!" says E. F. Mundy, New York, National Biscuit Co.'s director of traffic. "Make sure material is shipped in suitable equipment," agrees M. I. Adams, traffic consultant, Cutler-Hammer, Inc., Milwaukee. "Select proper cars for the lading being shipped," adds N. C. Zollar, general traffic manager, Lincoln Electric Co., Cleveland.

In the same general vein, C. A. Mitchell, commissioner, Memphis Freight Bureau, suggests removal of "all protruding objects, such as nails, cleats, and steel strapping ends from walls and floors of box cars," and "filling or smoothing of holes or other rough spots in inner linings." Package freight," he points out, "takes a terrific beating on a long haul when such objects are left in linings or floors."

Other comments on the same basic subject urge greater use of one or more of the many different types of specialized damage-prevention devices now available. H. A. Bucklin, traffic manager, F. H. Snow Canning Co., Pine Point, Me., likes Compartmentizer cars. "With them, he says, "we have cut our claims on canned foodstuffs in fiber cases to the absolute minimum—probably 95% compared to the conventional cars of a bygone era." J. R. Morton, assistant to president, Vega Industries, Syracuse, N.Y., is equally enthusiastic about "device" cars; and so is H. J. Bowman, GTM, S. C. Johnson & Son, Racine, Wis.

Mr. Bowman puts rubber dunnage in the same valuable damage-preventing equipment class. So do H. P. Gabriel, general traffic manager, Hershey Chocolate Corp., Hershey, Pa., and J. A. Foley, traffic manager, American Furniture Co., Denver. "Inflatable rubber dunnage," says Mr. Gabriel, "is one of many new innovations in packaging, stowing and blocking, special bins, etc., which have been a valuable contribution."

2) *Follow up, fast, with carriers, suppliers or customers when damage occurs.* This draws strong support from some of the men already quoted, as well as others. "Whenever possible," says W. C. Cole, general traffic manager, Georgia-Pacific Corp., Portland, Ore., "we find it most beneficial to follow through the actual delivery to our customer . . . This keeps us fully informed as to whether we are doing a complete job. If any difficulties arise, we can promptly take corrective steps." G. D. Cron, traffic manager, Chevrolet Oakland (Calif.) division, General Motors Corp., also makes it a policy "to run down chronic complaints. On arrivals, where we find any chronic difficulty, we immediately take steps for its prevention." "In cases of recurring damage, we visit customer's plant at time of unloading to learn the cause," says F. W. Bennett, assistant vice president and traffic manager, Sharon Steel Corp., Sharon, Pa.

D. L. Koerber, executive secretary, Coal Traffic Bureau, Pittsburgh, advocates "prompt and complete inspection" and "objective suggestions based on facts, passed on to all parties involved." Similarly, W. J. LaLuzerne, Traffic Committee, Green Bay (Wis.) Association of Commerce, suggests "immediate follow-up of all loss and damage," so "future correction" can be based on "concrete examples."

3) *Use proper packaging.* This gets special emphasis from, among others, Vega Industries, S. C. Johnson and Syracuse China Corp., Syracuse, N.Y. (W.S. Carter, director of transportation). Johnson's packages, says Mr. Bowman, must be approved both by the company's traffic and industrial engineering departments; "must comply with or be better than specifications." Mr. Carter says his company will not approve a new pack until it has been drop- and vibration-tested, and that it periodically repeats these tests. Cessna Aircraft Co.'s Commercial Aircraft division, Wichita, Kan., uses a similar testing program, according to its traffic manager, E. Rudolph, Jr.

R. R. Rabon, traffic manager, Campbell Taggart Associated Bakeries, Inc., Dallas, cautions against re-use of con-

**PERFECT SHIPPING**

tainers unless they are properly engineered for that purpose. A. A. Jusko, TM, Trenton (N.J.) plant, Fedders Corp., suggests that it's a mistake to ship heavy and light objects together just to save on cartons; when a heavy object crushes a lighter one, both may be damaged. Somewhat similarly, A. H. Wilson, manager, Great Falls (Mont.) Shipping Association, thinks several small cartons may be better than one overloaded big one—and points to the absurdity of shipping mattresses, for example, "in paper just slightly heavier than your butcher uses for a couple of steaks."

4) *Use legible markings.* Closely allied to proper packaging, and mentioned almost as frequently, is legible

(*Continued on page 60*)

ACCEPTED LOADING METHOD for wire coils shipped in device cars puts three rows on the floor, with a second row nested into the first, and both cross-braced at frequent intervals.

PERFECT SHIPPING

# Damage Reducer

By J. C. HUNTTING
General Traffic Manager,
American Chain & Cable Co.,
York, Pa.

Can device cars be used for shipment of wire coils?

The answer—based on four years of experience—is definitely "Yes."

American Chain & Cable uses steel wire of various diameters in the manufacture of chain, chain products, wire rope, wire strand, cable, etc. Most of the wire is produced in AC&C's Page Steel & Wire division mill at Monessen, Pa., and shipped:

To York, Pa., for chain and chain products;

To Wilkes-Barre, Pa., and Houston, Tex. (Hazard Wire Rope and American Cable divisions) for wire rope and strand; and

To Adrian, Mich., Fairfield, Iowa, and West Pittston, Pa. (Automotive and Aircraft division) for cable, strand and small flexible wire rope.

Before device cars were adopted, wire was shipped in coils, weighing approximately 375 lb each. Coils were loaded directly on car floors—the first straight, the second resting on the edge of the first, the third on the edge of the second, and so on across the car, from left to right. A second layer was placed on top of the first, but in reverse order so coils locked against each other. Because of the weight involved, coils were generally loaded only two layers high.

This method required four men and a pole or ram truck to load the coils, with the truck bringing them into the car and unloaders sliding them from the ram and placing them in position. In unloading, the procedure was reversed. Each operation required considerably more than half a day.

In attempting to shorten that time, we tried setting coils on edge, packing them as tightly as possible. This cut loading time, but, because of shifting of the load, was no help at the unloading end. Each coil still had to be picked up manually. Also, because of load shifting, the ends of the coils became caught or snarled with others, causing "U's" or "V's" in the wire. These damaged sections were unusable.

Device cars were first loaded with a ram truck, seven coils per load, three "lifts" across the car. Since there was not enough room for a fourth row of coils, this method left a little air space between car sides and load. Cross braces were placed tight against the coils in three spots at each end of the car. But results were not good; because of the side space, the load still shifted.

Results were better, however, when wooden filler blocks were made and placed to take up the side space.

Eventually, after further experiments, we devised a standard loading method (illustrated). This puts three "lifts" on the floor, with a second layer of three fitted into the "V's" in the first layer. On arrival at York, the unloading crew simply removes the upper blocking, inserts a lift truck ram through a row of coils, and takes them directly to storage. Following removal of the lower blocking, the same procedure is repeated until the car is empty. The whole operation requires only two men and a truck, and about four hours per car.

Use of device cars also has changed considerably shipping procedures from Monessen to Wilkes-Barre and Adrian. Approximately 4,000 lb of wire, drawn to proper size and formed into small coils, are placed in 4-ft-cube wire basket Cargotainers. Using lift trucks, a total of 22 baskets are placed in each 50-ft device car, with each row being held tight by cross braces. Loading time has been cut to approximately one hour; unloading time, including transportation of coils to storage or production, is less than three hours. Previously, these coils were loaded loose on the floor, and had to be handled individually at both origin and destination.

In summary, use of these cars not only has eliminated damage, but has halved loading and unloading time and released for more productive work half the men formerly required.

# 'One-Plan' Piggyback Urged

► **The Story at a Glance: A proposal for "one-plan piggyback", a plea for Official Territory transloading of outbound freight, a fast-moving discussion of agreed charges, and a slashing attack on regulation highlighted a lively spring meeting of the New England Shippers Advisory Board.**

In two full, future-attendance-stimulating days at Springfield, Mass., March 9-10, New England shippers gave formal or indicated support to several railroad proposals. And they advanced some new ideas of their own for improving traffic movement and, presumably, building up railroad tonnage.

The new shipper-sponsored ideas called for a "single plan" for TOFC service, and for inauguration in Official Territory of transloading arrangements for freight outbound from New England.

The first suggestion came from R. S. Callahan, of Holyoke, Mass., traffic manager of Lestoil, Inc., a company which originated 20,000,000 pounds of piggyback freight over three railroads in 1959 and expects to double that volume this year.

"Why not," Mr. Callahan asked, "work towards establishing one fair and impartial piggyback plan for both shippers and the motor carrier industry, free of any specific mixture provisions, without unjust discriminations, undue preference or advantages? One strong plan will help to widen markets; promote adequate, efficient and economical service; and foster sound economic and financial conditions in the railroad industry."

Back of Mr. Callahan's proposal, in part, was his statement that Plan III piggyback (rail transportation of shipper trailers) "has created problems, such as excessive drayage costs on either end," and the fact that "few shippers can consistently offer two trailer-loads of sufficiently different commodities to qualify under the 60-40% rule."

"Piggyback," he added, "can be beneficial to both shippers and rail carriers—but only if it is properly organized."

It was Serge Neprash, traffic coordinator, Armstrong Rubber Co., West Haven, Conn., who advocated transloading for outbound New England freight, "perhaps at such points as Albany, N. Y., and Trenton, N. J." Such transloading, Mr. Neprash said, would give New England shippers better service than is available from conventional stop-off cars, improve use of railroad service and facilities, and increase rail traffic. By board action, the matter will probably be referred within the near future to the Research Group of the Eastern Railroads' Traffic Executive Association.

The discussion of agreed charges—conducted by A. W. Izzard, general freight agent, Canadian Pacific—marked a departure from previous New England board policy, which had precluded even general consideration of rate matters. The interest which Mr. Izzard aroused, plus the formal questions and informal talks which followed his presentation, indicate, however, that general rate matters may provide a fertile topic for future board meetings—at least as far as the New England territory is concerned.

Other subjects of special attention were LCL freight—of historic interest to New England industry—and clean cars. NESAB's LCL Committee is now designated as LCL-TOFC—a relation explained in the statement by its railroad chairman (C. R. Erlandson, administrative assistant—freight sales and service, New York Central), that "expansion of TOFC to handle LCL is a certainty."

The clean car discussion produced considerable sentiment in favor of the suggestion advanced in Railway Age's February Traffic Poll (RA, Feb. 29, p. 13)—that railroads be allowed to consider dirty cars as loaded cars, and refuse to accept them from consignees until properly cleaned. It also brought the counter-suggestion that industries furnished with dirty cars be given an additional day of demurrage-free time for cleaning them.

The board ratified resolutions adopted last fall by the National Association of Shippers Advisory Boards, asking that shippers be notified by telephone or telegram when a bad-order delay of 48 hours or more is anticipated; and urging on the railroads "a maximum effort in the car repair program, the upgrading of present rolling stock, and the addition of sufficient new equipment to maintain a supply of cars adequate to the demands of the shipping public."

Additionally, it indicated approval of railroad routing of LCL freight, and concurred with the Jan. 26 action of the Northwest Shippers Advisory Board in supporting substituted service, i.e., "use by rail carriers of trailers between stations for the handling of LCL freight, in lieu of box cars, for the purpose of offering users of transportation more efficient LCL freight service and for the further purpose of making available more box cars for transportation of carload freight."

The attack on regulation—by Boston & Maine President P. B. McGinnis at the board's concluding luncheon session—was aimed at regulation in general; not at rail regulation alone.

"Where," he asked, "is regulated industry going, over the long pull?

"Regulation focuses on price. It takes no account of quality or regularity of service; of innovations; of development of new services or new equipment. Where competition stimulates research, development and service as avenues to higher profits, regulation restricts and destroys the incentive to make profits because they may lead to lower prices.

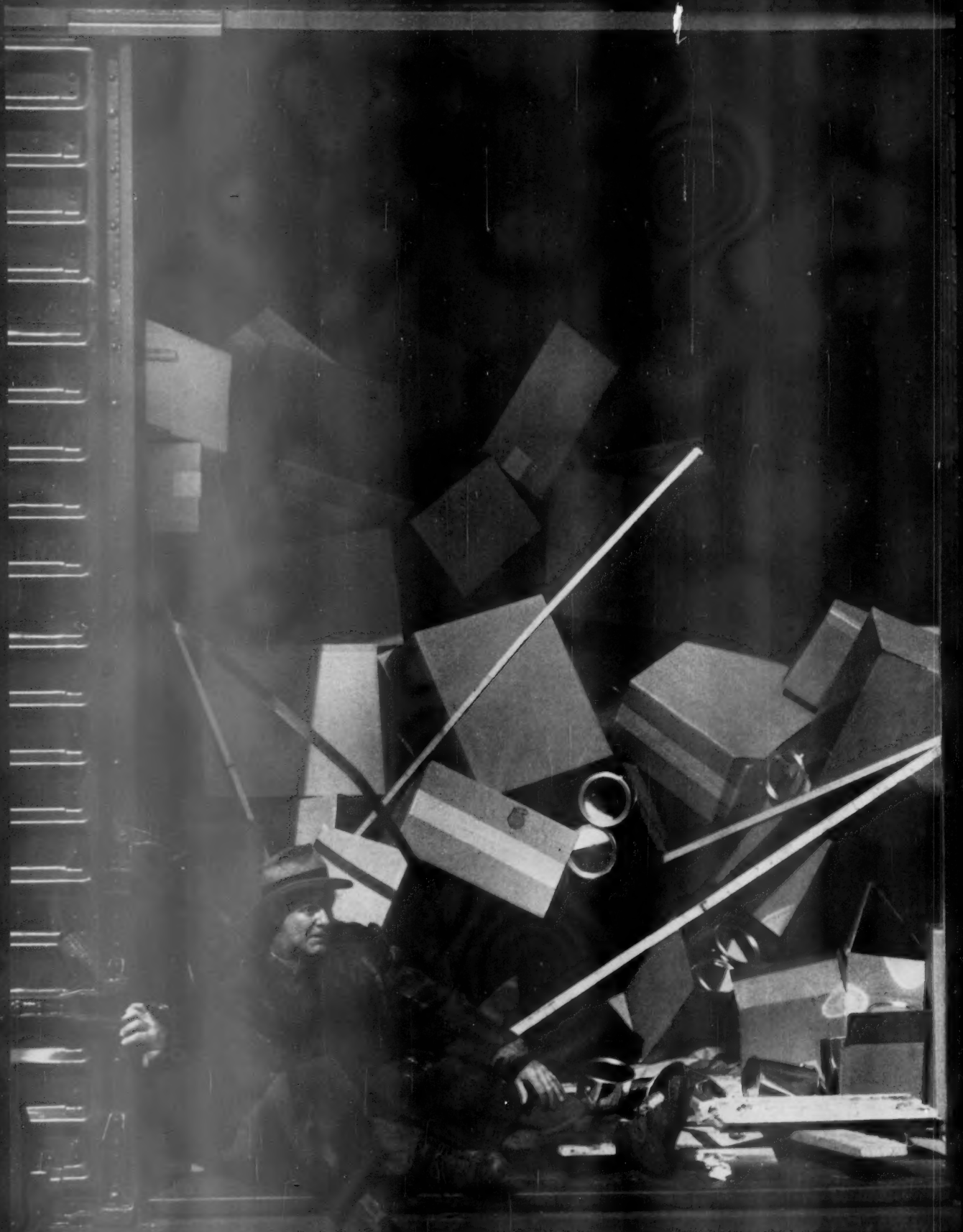
"Regulation has come to the point where its end result is determined by political expediency—not by the economic factors which control operation of other industries. We in regulated industries should have the same freedom to produce better service that you in other industries have to produce better products—but instead we have been forced by regulation to concentrate on cost reduction.

"While we have been doing that, government has promoted other forms of transportation so they can give the kind of service the public wants and that regulation prevents railroads from providing. While we are forced to worry about rates, our competitors concentrate on service."

The B&M president had, however, a warning for those very competitors. "Regulation," he said, "is doing the same thing to the airlines—even to public utility companies—that it has done to railroads . . .

"The net effect of regulation has been bad—not good. It's time for all regulated industry to join hands to convince our regulators we need reasonable profits; fair depreciation; freedom to cooperate and to merge . . ."

F. J. Orner, vice president and chief of operation of the New Haven, expressed "discouragement" at the board's forecast of a 0.2% decline in second-quarter carloadings — a prediction slightly modified by the "hope" that heavier loads in fewer cars would produce greater total revenues. "The future of the New Haven and of all other New England railroads is dim," Mr. Orner said, "if the projected decrease in loadings is to be the pattern of the future. We want, and we need, more business—and we have a lot of plans for improving our service to handle it."



How's this for a nightmare? Extreme, perhaps, but we offer a "tranquilizer": *Damaged goods and damage claims are reduced when shippers use new antislip containers treated with Monsanto Syton P.*

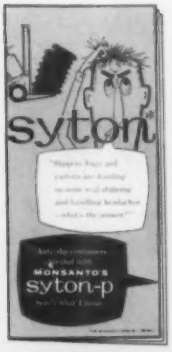
# SYTON P treated containers resist slip... reduce shipping and handling damages without a single costly change

Containers treated with SYTON P *stay put*—prevent load shifts and accidental spills. Costly breakage is reduced; customer complaints and claims drop off. SYTON P is Monsanto's antislip agent, an invisible nonskid finish built right into the package surface.

Today, leading manufacturers offer low-cost multiwall bags and corrugated cartons treated with SYTON P. They stack higher, more safely; handle easier, faster. No costly change in your present package design is necessary, no change in equipment needed. Want a booklet describing ALL the advantages? Use the handy coupon.

**SEE HOW SYTON P PERFORMS . . . IN YOUR OWN OFFICE**—Just send us two business cards. We'll treat them with SYTON P and return them. Then, *you* test SYTON P in the comfort of your office chair: First rub the untreated, then the treated surfaces together. Compare the difference. Like to try it? Just attach two of your cards to the coupon. (*See our SYTON P demonstration at the National Packaging Exposition, April 4-7, in Atlantic City . . . Booth 927-929.*)

Monsanto®




**MONSANTO CHEMICAL COMPANY**
**Inorganic Chemicals Division**
**Dept. 913, St. Louis 66, Mo.**

☐ I want the new booklet on what SYTON P can do for me.

☐ I want to test SYTON P on my business cards, attached.

*Name*.....

*Company*.....

*Address*.....

*City*..... *Zone*..... *State*.....

SYTON: Reg. T. M., Monsanto Chemical Company

# How the B&M nips hot boxes "in the bud" 85 miles away

Only six other railroads suffer as heavy a passenger-commuter cost-burden as does the Boston & Maine. While battling this condition through the various regulatory commissions, Patrick B. McGinnis also fights to improve the efficiency of revenue-producing freight operations.

A key step in increasing freight operations efficiency was the installation of SERVOSAFE® Hot Box Detectives.*

This patented and performance-proved system, expanded with the SERVOSAFE Compatible Transistorized Carrier System, enables the B&M dispatching office in Boston to spot a hot box on a train in Wells Beach, Maine — *immediately and automatically* — before the hot box can cause damage, delay, or danger—even before the train crew knows it's there!

Installations at strategic locations are contributing importantly to drastic reduction of freight delays and operating costs for the B&M.

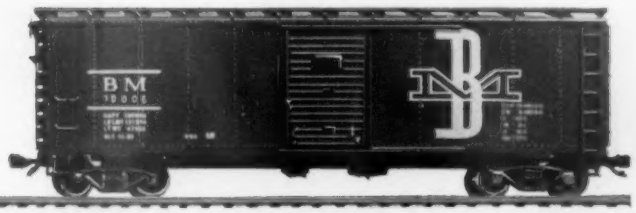
With the Compatible Carrier and Automatic Alarm Systems, SERVOSAFE Hot Box Detectives continue to lead the way in serving railroad safety and efficiency. Full information is available on request.

*Protected by U.S. & Foreign Patents, Including U.S. Patent No. 2,880,309
Other U.S. and Foreign Patents Applied For

## SERVO CORPORATION OF AMERICA

*Serving Safety Through Science*

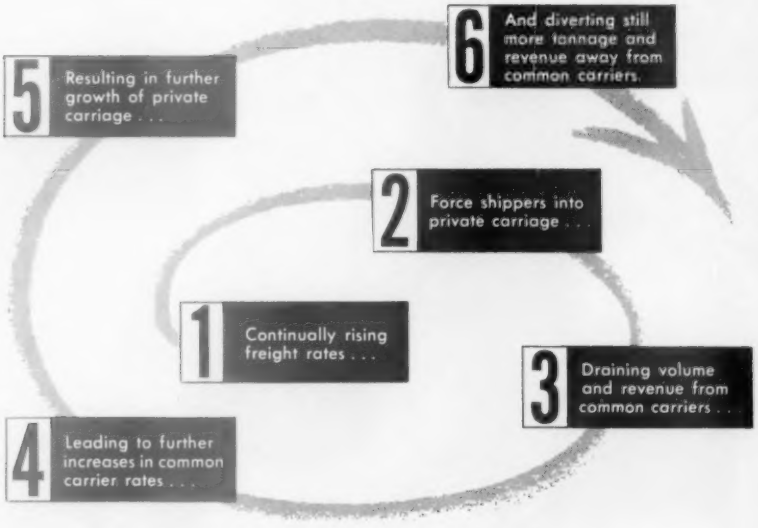
**Railroad Products Division** • 111 New South Road • Hicksville, Long Island, New York




*Patrick B. McGinnis, president*
*Boston & Maine Railroad*

**BRISTOL-MYERS'** principal plant, located at Hillside, N. J., is admirably sited to ship or receive by conventional rail, piggyback, or common or private truck transport. It is bisected by Lehigh Valley tracks (between the two big buildings); is adjacent to New Jersey's multi-lane east-west Highway 22.

# Why Bristol-Myers Likes Plan III


1
Continually rising freight rates . . .
2
Force shippers into private carriage . . .
3
Draining volume and revenue from common carriers . . .
4
Leading to further increases in common carrier rates . . .
5
Resulting in further growth of private carriage . . .
6
And diverting still more tonnage and revenue away from common carriers.

**"PLAN III PIGGYBACK CAN BREAK THE VICIOUS CIRCLE** whereunder more and more shippers are forced into private carriage by increased charges for common carriage, with the resultant draining of volume from common carriage calling forth further increases in that medium, and so ad infinitum."

"Plan III piggyback is a natural outgrowth of modern-day competition in the transportation industry . . . It will stabilize common carrier rates and charges, deter shippers from entering the field of transportation, enable railroads to capitalize on their currently unused capacity by making full use of their natural advantages, and bring about improvements and efficiencies in all forms of transportation to the ultimate benefits of all shippers and carriers."

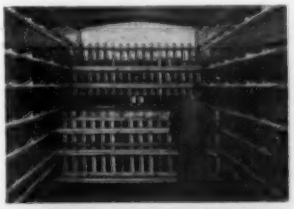
That's the high opinion held by David M. Daly, director of traffic for the Bristol-Myers Company, concerning flat car transportation of shipper-owned or shipper-leased truck-trailers. Such transportation can be, he thinks, the means of breaking "the vicious circle whereunder more and more shippers are forced into private carriage by increased charges for common carriage, with the resultant draining of volume from common carriage calling forth further increases in that medium, and so ad infinitum."

Mr. Daly's convictions are based on the "assessment" which his company

(*Continued on page 30*)

"SIGN OF SEL EQUIPPED PROTECTION"

That's it! After long research, much experimenting and testing Sparton now offers you the greatest advance in freight car loading systems—The SPARTON EASY LOADER—with greater shipper savings and a greater reduction in damage claims. Thus, Sparton makes two major contributions in freight car loading systems in the last three years.



***Here is what SEL (Sparton Easy Loader) means:***

**GREATER ECONOMY:**—Simplified design provides greater shipper savings—more undamaged merchandise for the market.

**EASIER LOADING:**—Automatic locking crossmembers speed loading; one man operation. Crews are enthusiastic.

**FASTER UNLOADING:**—Semi-automatic unlocking crossmembers make unloading a breeze—one man operation.

***SPARTON TRI-BELT (STB) still offers these shipper benefits:***

**FLEXIBILITY:**—Side members and cross member design make possible adjustability to meet any load requirement.

**VERSATILITY:**—Rotating crossmembers permits closer fit, better protection for any load—including mixed loads.

**CLOSER ADJUSTMENTS:**—Sparton special design with off-center crossmember ends permit less than a small fraction of an inch adjustment.

*For greatest shipper benefits—Ship in a SPARTON device car.*

"SIGN OF STB EQUIPPED PROTECTION"

**SPARTON RAILWAY EQUIPMENT**

**Division Sparton Corporation • 17333 Healy Avenue • Detroit 12, Michigan**

*"Specialists in the prevention of damage to goods in transit"*

"SIGN OF SEL EQUIPPED PROTECTION"

Stokely's Finest

Performance Proof No. 122

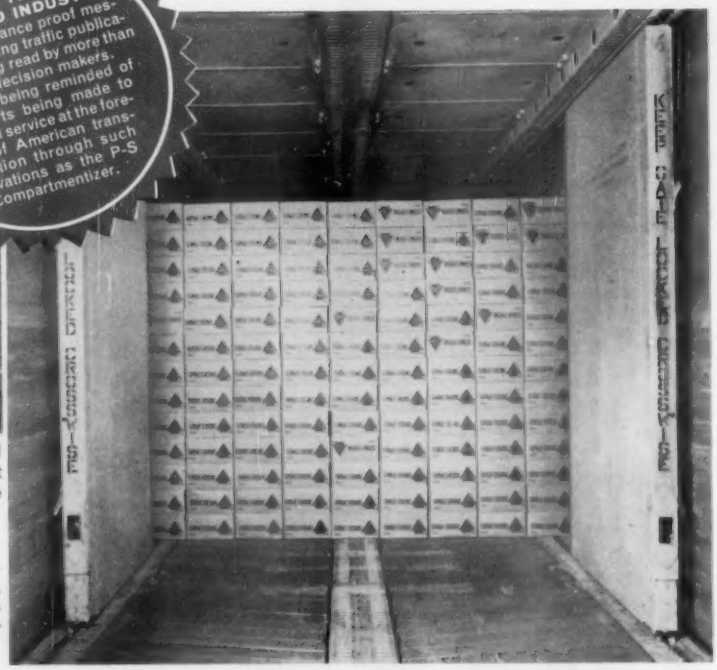
# Stokely-Van Camp Shipments

**TO THE RAILROAD INDUSTRY**

this performance proof message in leading traffic publications is being read by more than 37,000 key decision makers. They are being reminded of the efforts being made to keep rail service at the forefront of American transportation through such innovations as the P-S Compartmentizer.

**UNLOADING:** J. M. Austin, Polar Refrigerated Services, Inc., checks and approves the perfect condition of the 2000 cases that traveled in the center of this Compartmentizer-equipped car.

**UNLOADING:** Unloading crews found B-end lading had arrived in perfect position, perfect condition. With Compartmentizer gates swung back, and automatically locked with safety catches against the car sides, unloading was fast and easy.



## These shipper-conscious carriers have Compartmentizers in service or on order.

Atchison, Topeka & Santa Fe
Baltimore & Ohio
Bangor & Aroostook
Central of Georgia
Chesapeake & Ohio
Chicago, Burlington & Quincy
Chicago Great Western
Chicago & North Western
Fruit Growers Express
Great Northern
Merchants Despatch Transportation
Milwaukee Road
Minneapolis & St. Louis
New York Central
Norfolk & Western
North American Car Corp.
Northern Pacific
Pacific Fruit Express
Pennsylvania
St. Louis Southwestern
Seaboard Air Line
Southern Pacific
Texas & Pacific
Union Pacific
Western Pacific

**Ask for them by name . . . Compartmentizer-equipped cars.**

**UNLOADING:** One man easily unlocked the Compartmentizer gates protecting A-end lading, and rolled them away from the load. All 900 cases here were found to be 100% perfect. Unloading was speeded since there were no parts or dunnage to handle.

**UNLOADING:** With unloading nearly completed, even cases against car end wall were found perfect. Compartmentizer gates and smooth car interior helped lading come through without damage, and saved time since no car clean-up was required.

# Stay Calm Cold and Collected

*P-S Compartmentizer eliminates damage 100% for frozen food shipment.*

Stokely-Van Camp partial-loaded this P-S Compartmentizer equipped Pacific Fruit Express mechanically refrigerated car in Santa Clara, California, with 22,550 pounds of frozen foods. Then it was sent to Oxnard, California, for a stop-to-complete load of 46,800 more pounds—all consigned to Stokely-Van Camp at Polar Refrigerated Services, Inc. warehouse at Nashville, Tennessee. Total movement—2850 miles over the S.P., T. & N.O., Cotton Belt and L&N.

What's unusual? Not a single damaged case! Not a single heat-spoiled or thawed food package!

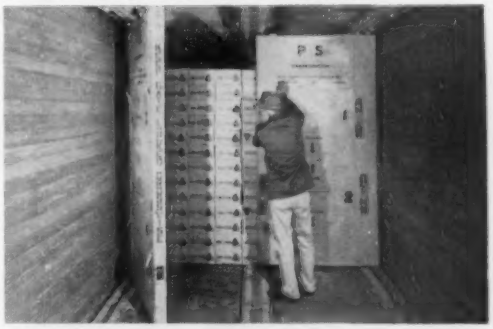
The P-S Compartmentizer had done its lading protection job. And due to Compartmentizer design and installation procedure, no vital cold was drained off, no heat transferred into the car from outside.

The way in which P-S Compartmentizer rugged steel gates swing smoothly out of the way—in fact, outside the car doorway—for faster lading handling was appreciated by Santa Clara loading personnel. The Compartmentizer's ability to keep lading in place while separating stop-to-complete shipments was a real help to Oxnard employees as no rearranging or load leveling was necessary, no jumbled or damaged cases. And at Nashville, Polar Refrigerated Services personnel who unloaded liked the way their work was made faster and easier since all cases had stayed just as they were loaded . . . calm, cold and collected.

Get more performance proof. Learn how your valuable lading can be protected from the normal impacts and shocks of modern high speed train make up and travel.

This brochure will give you facts about how the P-S Compartmentizer can serve you. Write for it today.

**LOADING:** P-S Compartmentizer gates swing flat against car side walls to allow maximum room for employees and materials handling equipment. Here 550 cases of frozen food are being loaded into the B-end, at Santa Clara. The A-end received 300 cases.




**LOADING:** With cases in place, one man easily moves Compartmentizer gates into position against load face. Four lever-action locking handles on each gate provide four-point securement—two at ceiling, two at floor.

**LOADING:** At Oxnard, the A-end gates were easily opened, and the 300 cases found in perfect condition. Six hundred more cases were added to the A-end for a total of 900 and the gates were repositioned and locked.

**LOADING:** With loads secured at A and B-ends, 2000 more cases were loaded into the center of the car. Completely recessed locking handles provide a smooth gate face that eliminates lading damage from protruding parts.

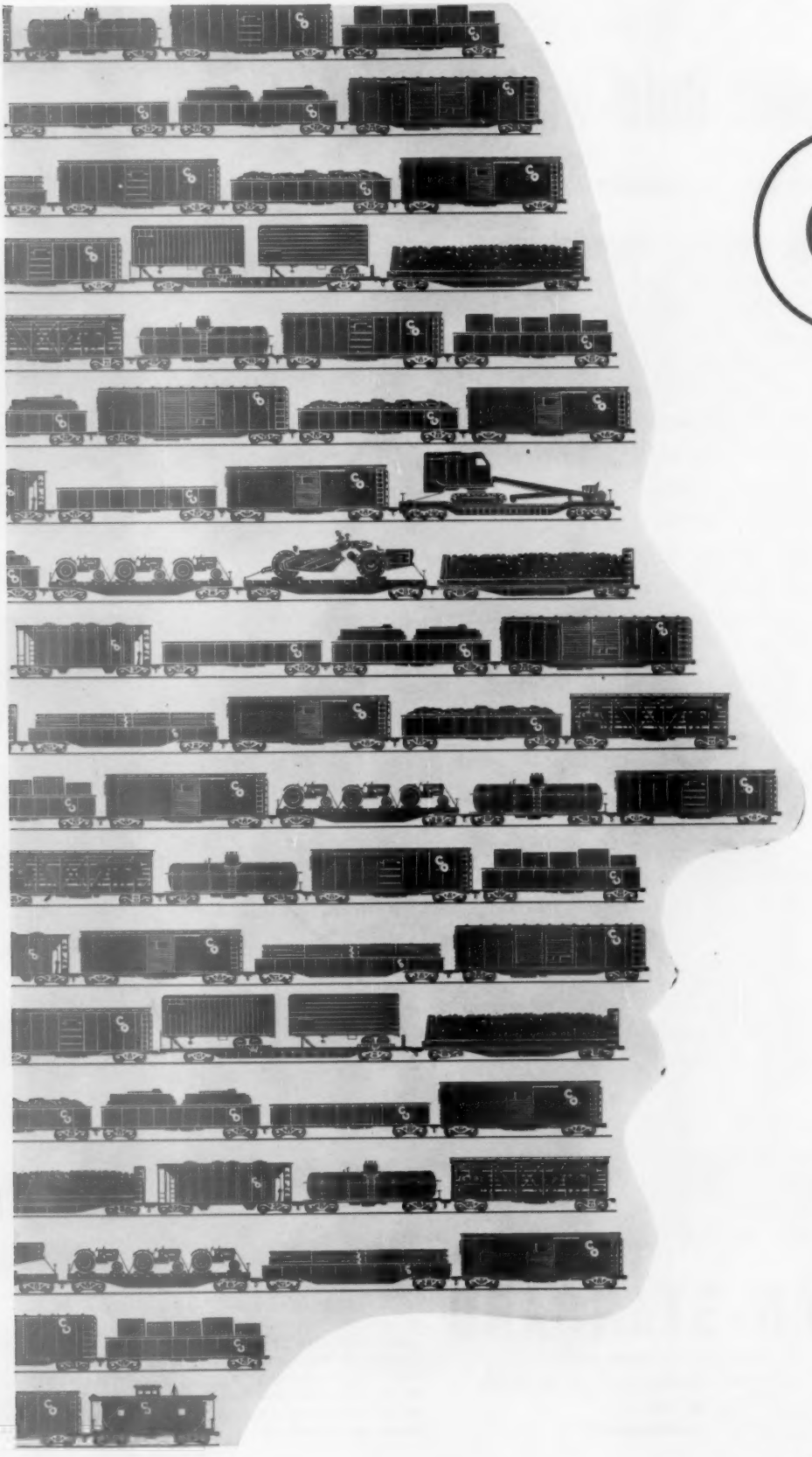
**PULLMAN-STANDARD**

A DIVISION OF PULLMAN INCORPORATED

200 SOUTH MICHIGAN AVENUE, CHICAGO 4, ILLINOIS

BIRMINGHAM, PITTSBURGH, NEW YORK

J. C. Fennelly Co., San Francisco Representative



C AND O

# utstandability

## Chessie's true image ...people who make your job easier

C&O's concept of successful railroading starts with its people... service-minded people dedicated to being helpful to you, the customer.

In the movement of freight along Chessie's 5,100-mile boulevard of steel, your Chesapeake and Ohio traffic man can quickly tell you where your car is and accurately log its destination time. He can handle strategic diversion, or produce special equipment. He's always ready with recommendations to your advantage regarding rates, routings and schedules.

Chesapeake and Ohio representatives are outstandingly capable of making your job easier. Their ability to do this, of course, is supported by Chessie's modern, highly coordinated transportation system.

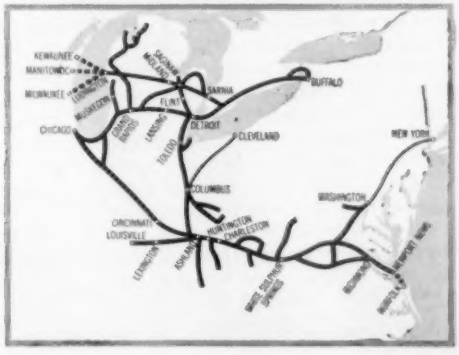
*Chessie has just published a new railroad map. If you'd like a copy call your C&O representative or write to James E. Doyle, Vice President—*

**Chesapeake and Ohio Railway**

TERMINAL TOWER, CLEVELAND 1, OHIO

*Outstandability in Transportation*

C&O provides personal service through a coast-to-coast, Canada-to-Gulf network of 56 freight traffic offices.



## BRISTOL-MYERS LIKES PLAN III (*Continued from page 24*)

(and the industry of which it is a part) is currently making of three transportation possibilities—common carriage without Plan III, private carriage, and common carriage with Plan III.

On a service basis, the first "offers little attraction," and would simply put drug and toilet preparation companies "further and further into private carriage."

Straight private carriage has the advantage of better control over shipments. But, as Mr. Daly says some of his colleagues have discovered, "it has more headaches than all our Bufferin can cure."

Common carriage with Plan III, on the other hand, gives shippers "many of the service benefits of private carriage," while allowing them to stay out of the transportation field. As compared to straight box car service, Plan III accelerates transit time, avoids expense of blocking and bracing, and, even without that cost, practically eliminates damage. As compared to Plan II piggyback or motor common carriage, it puts terminal arrangements under direct shipper control, thus permitting better scheduling of loading and unloading, and eliminating congestion and demurrage and detention charges. The shipper who uses his own or leased trailers may spot them where he wants, move them when he wishes, and load or unload them at his convenience.

From the cost standpoint, at current rate levels, straight common carriage makes an equally poor comparative showing. As the accompanying table reveals (p. 34), costs either by common carrier truck or by Plan II piggyback range from 27 to 31% above those by Plan III or by private truck.

"The 3-cent-per-cwt difference in favor of private carriage as against Plan III is far from sufficient inducement to put us in the transportation business," Mr. Daly says. "But the 33-cent difference between private carriage and Plan II or motor common carriage is a very adequate inducement."

In Bristol-Myers' case, that 33-cent saving of private over common carriage would work out to more than $23,000 per year on movement of 3,500,000 lb each way between Hillside, N.J., and St. Louis. That is understandably important to a company which: (a) "in common with most others, has been assailed by a deluge of increased costs all along the line"; and (b) operates in a field "so intensely competitive that the possibility of recapturing a portion of the increases through price increases at the consumer level is practically non-existent." But Plan III, on the same movement, is producing annual savings of around $21,000 per year. The added economy of private transport is only $2,100. That, primarily, is why Plan III rates have caused B-M "to postpone its entry into the private carrier field."

Supporting evidence on the value of Plan III to both shippers and railroads comes from studies which Bristol-Myers has made of the possibilities of private carriage on shipments from Hillside to Detroit and to Chicago. "There is," the company finds, "no question that our flow of manufactured goods westbound and raw stores eastbound would support private carriage. But at the moment all

(*Continued on page 34*)

### Mr. Daly's views are of special significance, because:

- They are not merely his own. They are also, by and large, those of the Drug and Toilet Preparation Traffic Conference, whose approximately 100 members account for more than 80% (dollar volume) of all drugs, medicines and toilet preparations moving in interstate commerce.
- The drug and toilet preparation industry is a major user of common carrier truck service. "A large segment of our volume—that which moves from plant or warehouse to customers—moves practically in its entirety in less-truckload lots via motor common carriage. We feel certain it will continue to move via that medium," because there are practically no customer purchases of sufficient size or weight to permit use of other modes of transport. Hence, "we would go to great lengths to prevent harm from befalling the motor common carrier industry."
- The industry is one which (on non-customer shipments) can easily utilize—and in many cases is utilizing—private highway transportation. "Practically all our carload and truckload movements are from plant to plant, or from plant to warehouse. This includes inbound movement of raw materials and packaging supplies to our manufacturing plants. This volume is particularly susceptible to private carriage—or to Plan III . . . There can be little question that our members will avail themselves of private carriage on their plant-to-plant and plant-to-warehouse movements, and seek to couple their volume inbound movements from suppliers with said movements to the greatest degree possible, if Plan III rates fall. Conversely, continuance of the Plan III rate structure will return to common carriage much of the tonnage now moving via private carriers, and prevent further diversion of considerable volumes of tonnage in that direction."

The man who expresses those views speaks with authority, because he is chairman of the Drug and Toilet Preparation Traffic Conference, and chairman also of its Executive and Plan III Committees. He has appeared as a conference spokesman in a number of official regulatory proceedings, including the key Plan III case—Eastern Central Motor Carriers Association, Inc., v. Baltimore & Ohio Railroad Company, et al., ICC Docket No. 32533. Much of the accompanying article is based, in fact, on his testimony in that case.

DAVID M. DALY

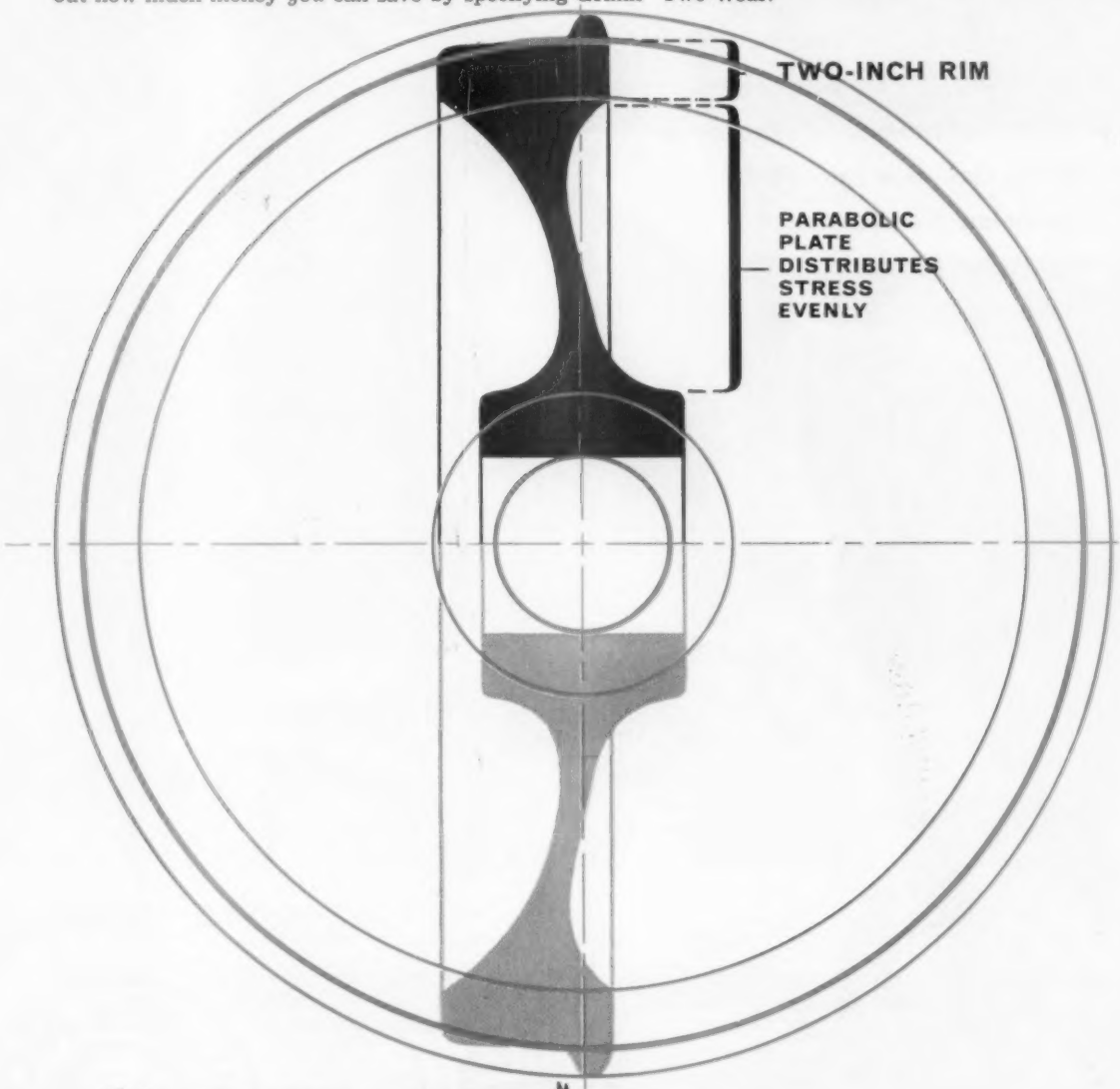
Mr. Daly was traffic manager of Bristol-Myers Products Division from 1945 to 1955 and has been its director of traffic since the latter date. He is chairman of the Transportation Committee of the Toilet Goods Association and a director of the Eastern Industrial Traffic League. He is a graduate of Niagara University and of St. John's University School of Law; and a veteran of military service—including 30 months in Alaska and the Aleutians—during World War II.

# GRIFFIN "TWO WEAR" WHEEL NOW APPROVED BY AAR

Developed to meet the grueling demands of high mileage freight cars, Griffin's "Two Wear" Wheel has been approved for application to 50- and 70-ton cars by the AAR.

Bonus feature Number One: the "Two Wear" Wheel is a *multiple-wear* wheel that can be "turned" several times. (You're assured of *at least* two full turns, regardless of flange wear.) The wheel has a two-inch rim, with one-wear tread and flange design, and is cast to within 20-thousandths of an inch dimensional tolerances.

Bonus feature Number Two is the parabolic shape of its plate—scientifically designed to minimize concentration of stress by *distributing* stress evenly. Call your Griffin Representative today and find out how much money *you* can save by specifying Griffin "Two Wear."



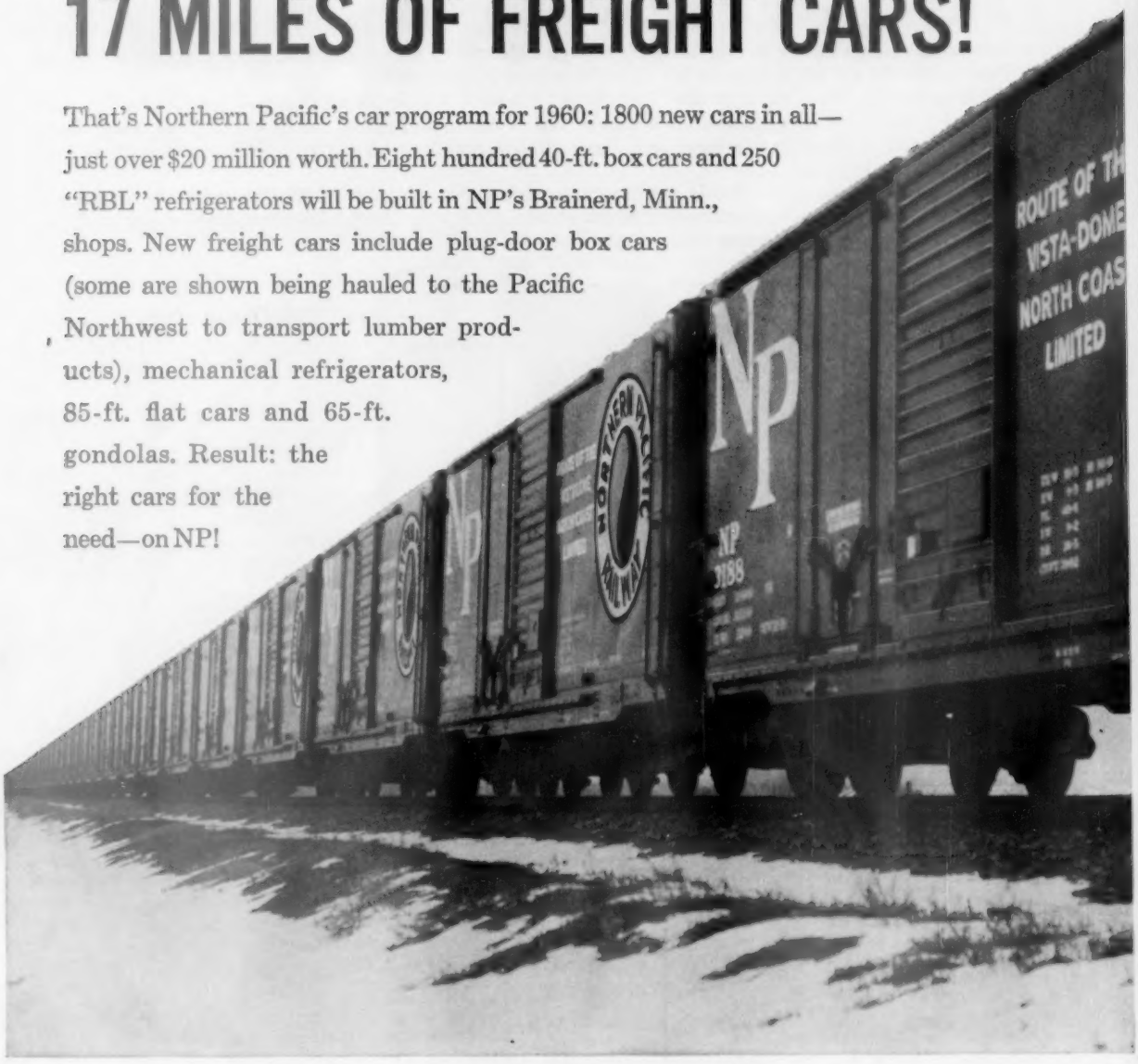

GRIFFIN

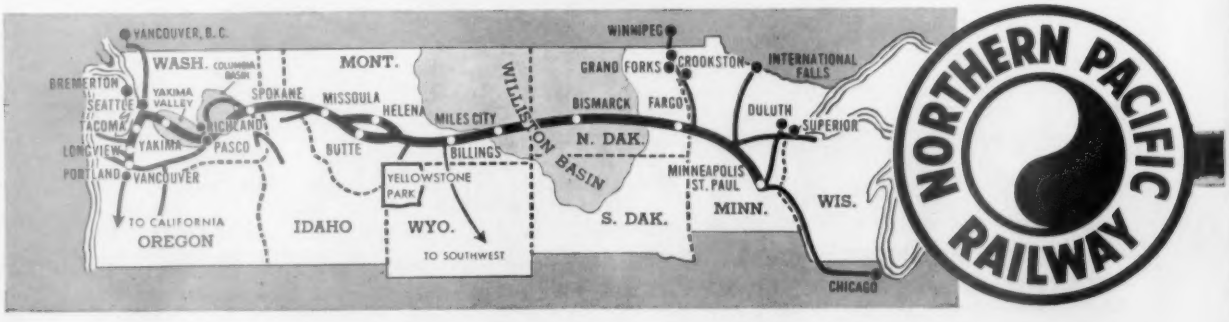
EQS
ELECTRIC QUALITY STEEL

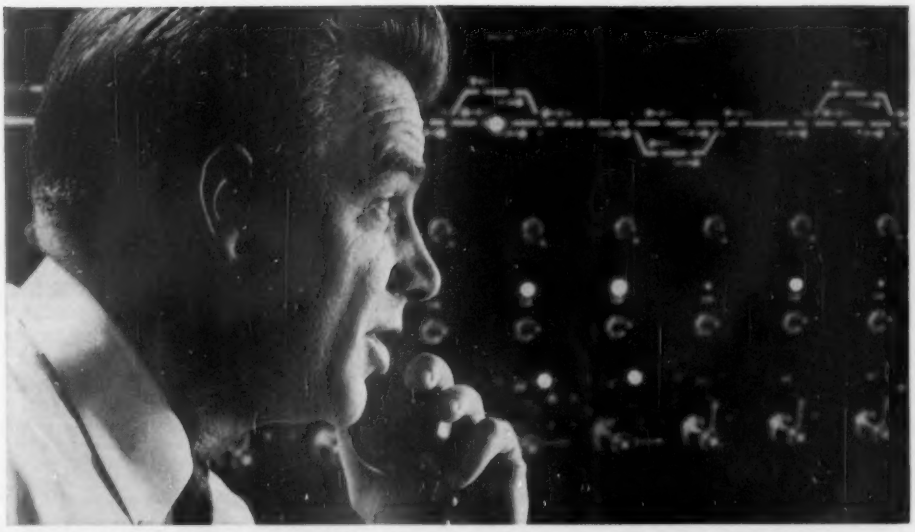
GRIFFIN WHEEL COMPANY 445 North Sacramento Boulevard, Chicago 12, Illinois
GRIFFIN STEEL FOUNDRIES Ltd. St. Hyacinthe, Quebec; Transcona, Man., Canada

# 17 MILES OF FREIGHT CARS!

That's Northern Pacific's car program for 1960: 1800 new cars in all—just over $20 million worth. Eight hundred 40-ft. box cars and 250 "RBL" refrigerators will be built in NP's Brainerd, Minn., shops. New freight cars include plug-door box cars (some are shown being hauled to the Pacific Northwest to transport lumber products), mechanical refrigerators, 85-ft. flat cars and 65-ft. gondolas. Result: the right cars for the need—on NP!





**95 MILES OF CTC TRACK** will be added to the NP CTC system in 1960. The new link will connect Livingston and Laurel, Montana. For NP shippers, Centralized Traffic Control means more efficient handling of goods—another sign of progressive railroading—on NP!

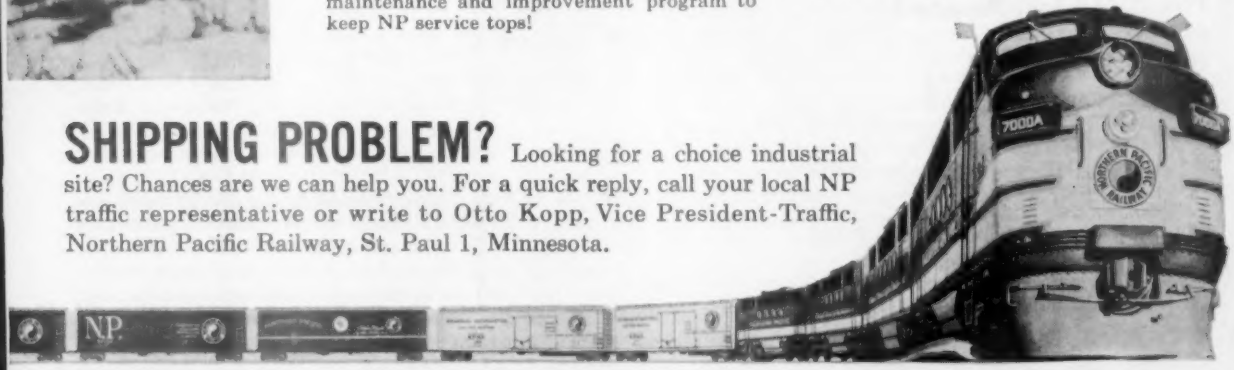
## 44 MILES OF WELDED RAIL

will replace standard rail on NP this year adding to the 234 miles already laid. And that's just part of the story. NP will re-lay many more miles of main line, branch and secondary track, and ballast additional miles of main and branch line, too. It's all part of a continuing maintenance and improvement program to keep NP service tops!

## BILLINGS SAVES BILLING!

NP's transloading service at Billings, Montana, can cut costs by reducing delays and damage. And it also provides better distribution and inventory control. Original-car shipment is divided and transferred to separate cars for each stop-off point—at no extra charge.

**SHIPPING PROBLEM?** Looking for a choice industrial site? Chances are we can help you. For a quick reply, call your local NP traffic representative or write to Otto Kopp, Vice President-Traffic, Northern Pacific Railway, St. Paul 1, Minnesota.




# NORTHERN PACIFIC—really terrific!

## BRISTOL-MYERS LIKES PLAN III (*Continued from page 30*)

further studies are being held in abeyance for the reason that continuance of Plan III will, we are certain, render our findings academic."

Mr. Daly is emphatic in his belief that Plan III is the most valuable, and likely to become the most important, of all the various piggyback plans. The only cloud he sees on the horizon of its potential growth is the possibility (mentioned independently in Railway Age, Nov. 30, 1959, p. 72) "that railroads may be forced by competitors, commissions or courts to set rates so high, or impose so many restrictions, that a basically attractive proposal becomes a physical impossibility."

The restrictions he most fears are those which might be imposed on leasing of trailers (B-M owns none; leases all it uses); or on the so-called "commodity mixture" rule. The latter, at least, is shared by other drug company traffic managers.

The present rule calls for a minimum of at least two commodities in each shipment, with no one commodity exceeding 60% of the total weight. Bristol, Mr. Daly says, "can live" with that restriction, because its "mixture of drugs NOIBN and toilet preparations NOIBN happens to meet the required pattern." But a "change in the pattern of our sales or introduction of a new volume item in either category would make it difficult, if not impossible, for us to meet the present 60% lading qualification." Publication of any more stringent mixing rule would, he feels, "very effectively bar us from participation in Plan III rates."

Many other interested drug companies, he adds, cannot meet even the relatively mild "two-commodity, 60%" rule; "none" could use Plan III under a more restrictive rule. Plan III, he emphasizes, is designed primarily to meet competition of private carriage. Since "there are no restrictions" under private carriage, any mixing rule is an obvious deterrent to Plan III's maximum success; the more stringent the rule, the greater the deterrent.

Bristol-Myers' interest in piggyback is not wholly confined, however, to Plan III. Between Hillside and Los Angeles, for example, it has successfully used a Plan III-IV combination, with freight moving to St. Louis under Plan III and west of that point under Plan IV by arrangement with a shippers' association.

Between Hillside and Chicago it still uses Plan II. That's partly because the rate is attractive ($1.01 per cwt under Plan II; $0.98928 per cwt under III); partly because it wants "to afford its rail carrier the opportunity of determining, on the basis of experience, in which service they would prefer to handle these shipments."

Both these movements represent traffic which has definitely been returned to the rails by advent of piggyback—the Los Angeles shipments from coastal water transport; the Chicago freight from all-highway service.

It also uses Plan II (alternating with motor common carriage) for about a million pounds a year westward from Hillside to St. Louis. (This is "extra" traffic, over and above the balanced 3,500,000 lb each way on which the company calculated relative costs of common, private and Plan III transport.)

Bristol-Myers is an admirable testing ground for piggyback, because its overall production and distribution pattern is so widespread and so varied that it can (and does) utilize almost any form of transportation service. Like other drug companies, it has explored private consolidations, shipper cooperatives, stop-off loading, and all other "known methods" of transport cost reduction.

Bristol's largest plant—the Bristol-Myers Products Division—covers 390,000 sq ft of space in Hillside, N.J., a suburb of Newark. Located on Lehigh Valley tracks, and adjacent to New Jersey's multi-lane Highway 22, it shipped out in 1958 80,000,000 lb of Bufferin, Ipana tooth paste and a host of other drugs and toilet articles. About 50% of this went in small lots directly to customers everywhere east of the Mississippi river (except Georgia, Florida, Alabama and Mississippi). Bulk of this movement was LTL; the balance, LCL, express or parcel post.

The other 50% of Hillside's output went to warehouses in Atlanta, Jacksonville, Memphis, Chicago, St. Louis, Denver, Dallas, Houston, Los Angeles, Oakland and Seattle. Warehouse stocks for Chicago and St. Louis are shipped, as mentioned above, under piggyback Plans II and III, respectively. The Jacksonville warehouse is fed in truckloads by motor common carrier, alternating with shipments via Willis Barge Lines; the Atlanta warehouse by common carrier truckloads, with occasional box car movements. Some traffic to both points may, however, be diverted to piggyback now that such service is available on southeastern railroads.

Shipments to the Memphis warehouse move by motor common carrier; those to Texas by Seatrain Lines and the Pan-

(*Continued on page 38*)

### How Costs Compare . . . On 70,000-lb Shipments, Hillside, N.J., to St. Louis, Mo., 940 miles

| | | | |
|---|---|---|---|
| **Private Carriage** | | | |
| Two trailers @ 35,000 lb each @ $0.40 per mile (2 x $0.40 x 940) | $752.00 | = $1.0744 | per cwt |
| **Motor Common Carriage**[1] | | | |
| 70,000 lb | $980.00 | = $1.40 | per cwt |
| **Plan II (All-Rail) Piggyback**[2] | | | |
| 70,000 lb | $980.00 | = $1.40 | per cwt |
| **Plan III Piggyback** | | | |
| Drayage at origin, 70,000 lb @ $0.10 per cwt | $ 70.00 | | |
| Loading at origin, 70,000 lb @ $0.04 per cwt | 28.00 | | |
| Four days' lease on two trailers @ $7.50 per day each | 60.00 | | |
| Rail charge per two-trailer flat car | 519.00 | | |
| Unloading at destination, 70,000 lb @ $0.04 per cwt | 28.00 | | |
| Drayage at destination, 70,000 lb @ $0.10 per cwt | 70.00 | | |
| | $775.00 | = $1.1071 | per cwt |

[1] Eastern Central Motor Carriers Association Motor Freight Tariff No. 15-K MFICC No. A-114 Item 5295.
[2] Lehigh Valley Railroad Company Freight Tariff 172-E ICC-C-9381 Item 1101.

*Coatings Supplier: Better Finishes & Coatings, Inc.*

# Urethane coatings pass the acid test and keep the tankers rolling...

"Spillage, fumes and sample drawings used to raise havoc with the paint we used on our acid carrying tankers," says Mr. Howard Bramble, Foreman of the West Chester, Pa., Terminal of E. Brooke Matlack, Inc., specialists in the motor transport of liquid chemicals. "At a cost of $275 per tanker for painting, and with the average paint job lasting less than six months, repainting of our acid tankers became an expensive maintenance problem."

A better, protective coating had to be found. Not only was repainting expensive; downtime for painting cut into the revenue each tanker earned.

Then—urethane coatings were applied to a single sulphuric acid unit as a test. At the end of a 16-month period without repainting the tanker showed no sign of pits, scars or acid action. Another year or more is expected before further painting will be required.

Now—urethane coatings are standard on all repaint jobs of Matlack acid tankers and stainless steel units. Accidental spillage and fume reactions still take place. But instead of the coating being eaten off, the equipment looks as "good as new" after washing and steam cleaning.

Urethane coatings give remarkable protection against highly corrosive agents such as acetic, hydrofluoric and muriatic acids, and many other forms of caustic acids and alkalis, as well as a long list of petro-chemical oils and solvents.

**If you are faced with an unusual corrosive problem for which you have found no practical and economical solution—perhaps urethane protective coatings hold the answer. Urethane coatings are available for a wide variety of applications ranging from corrosion resistant metal finishes and marine paints to waterproof coatings for papers and patent leathers. Write Mobay now for descriptive literature and a list of urethane coatings manufacturers who will work with you in resolving your protective coatings problems.**

**MOBAY CHEMICAL COMPANY**
Dept. RA-1 Penn Lincoln Parkway West
Pittsburgh 5, Pennsylvania

Mobay is the only domestic supplier of all the basic chemicals required to formulate the various urethane coatings systems, and developed the original technology of urethanes in the United States.

MOBAY
First in Urethane Chemistry

C-2

# There's only 1 Railway

SOUTHERN

# *that serves them* ALL!

ST. LOUIS

CINCINNATI

WASHINGTON
(Potomac Yard)

LOUISVILLE

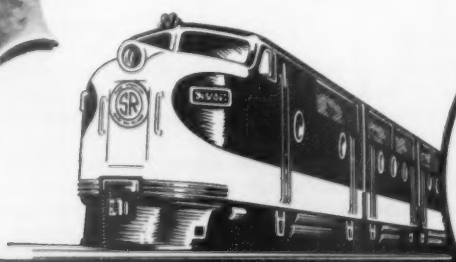
MEMPHIS

NEW ORLEANS

THE POINT IS THIS — six major traffic gateways connect the busy South of today with the rest of America. And only *one* railroad — the 8,100 mile Southern Railway System — serves all six!

For both shippers and receivers, this means dependable, *one-railroad* through service between practically any part of the South and any of its major gateways, either South-and-West or South-and-North.

No matter how you look at it, when your shipments are riding to, from or within the South, it pays to use the *one* rail system that serves more territory and more communities in the South than any other railroad. Ship and receive your freight via Southern and see!



THE SOUTHERN RAILWAY SYSTEM

SERVES THE SOUTH

## BRISTOL-MYERS LIKES PLAN III (*Continued from page 34*)

Atlantic Steamship Company. California warehouses are supplied by intercoastal steamer—though the combination of Plans III and IV piggyback may make inroads on that movement.

From each warehouse, shipments are fanned out to customers in small lots, usually by common carrier LTL service.

The company's second plant—Grove Laboratories, Inc., at St. Louis—has an annual output of about 20,000,000 lb of shampoos, cold tablets and other products not manufactured at Hillside. There again, about 50% goes directly to customers in LTL quantities; the other 50% goes to warehouses at Hillside, N.J., via Plan III piggyback, and at Oakland and Los Angeles via box car and common carrier truckloads.

Grove also provides St. Louis warehouse facilities for Hillside, receiving about 4,500,000 lb a year. Hillside reciprocates by serving as Grove's eastern warehouse, receiving around 3,500,000 lb a year. It is this largely balanced cross-shipment (of different products) that "sets up a natural situation for utilization of private carriage"—or of Plan III piggyback. The westward excess (1,000,000 lb) moves, as mentioned above, by Plan II piggyback or common carrier truck.

**"PLAN III PIGGYBACK** will . . . deter shippers from entering the field of transportation, enable railroads to capitalize on their currently unused capacity.

Bristol Laboratories, Syracuse, N.Y., produces vitamins, penicillin, streptomycin and similar ethical drugs; Luziers, Inc., at Kansas City, Mo., makes cosmetics for direct sale; and Clairol, Inc., Stamford, Conn., manufactures dyes, rinses and other hair preparations. Clairol is Bristol's newest, and very recent, acquisition; its transport pattern, still under study, has not yet exerted major effect on the company's overall traffic policies.

# Letters from Readers

### *College Contacts*

Reno, Nev.

To the Editor:

Your March 7 article on "How Close Are You to the Colleges?" is excellent and all too true. Railroads are not only weak in the matter of keeping in touch with the colleges, but in recruiting graduates as well.

*James M. Hoyt*
*Assistant Professor*
*University of Nevada*

Kent, Ohio

To the Editor:

I note, in the increasingly interesting and valuable columns of Railway Age, expressions of opinion which coincide with my own. For example:

Issue of Feb. 29, p. 66—you say "providing freight salesmen with names and addresses of principal receivers is primarily a responsibility of the railroads' sales headquarters." I agree wholeheartedly.

March 7 issue—Your Action Page piece entitled "How Well Do You Know the Profs?" Here at Kent State University we have few contacts with railroad people. The interest of railroads in this area in our Delta Nu Alpha program is weak, in contrast with great motor carrier interest.

*Newton Morton*
*Associate Professor of Transportation*
*Kent State University*

Lincoln, Neb.

To the Editor:

I would like to congratulate you on the editorial "How Well Do You Know the Profs?" in the March 7 Railway Age.

You suggest especially the importance of contacts with college teachers of transportation. May I suggest that a valuable service may also be performed in maintaining contacts with instructors in industrial relations? It is difficult for those working in this field to obtain information regarding railway labor policies and problems.

Copies of agreements, personnel manuals, training programs, films, and other materials would be helpful and welcome. With the railroads' labor problem being what it is, wider public knowledge in this area would be most timely.

*R. M. Bourne*
*Professor, University of Nebraska*

Atlanta, Ga.

To the Editor:

As a professor of transportation, I was deeply interested in your March 7 editorial "How Well Do You Know the Profs?" You are probably right in saying that railroad people and college professors should know each other better.

I have been impressed with activities of the Railway Systems and Procedures Association. It appears that this Association is moving aggressively into some of the railroads' most important problems. I am wondering if it would be possible for this important Association to develop some patterns by which selected college professors could attend some or all of the study sessions and seminars in future months.

*J. H. Lemly*
*Chairman, Transportation Department*
*Georgia State College of Business Administration*

*One of a series spotlighting the companies that work and grow along the Coast Line*

# Shippers Along the Coast Line

Top traffic man for Union Bag-Camp is J. D. Patterson, vice president and general traffic manager. Mr. Patterson joined the company in 1939 and became traffic manager the following year. A prominent figure in the paper industry, he has served as general chairman of the Southern Paper Manufacturers Association, since it was established eighteen years ago.

## Eighty Freight Cars a Day

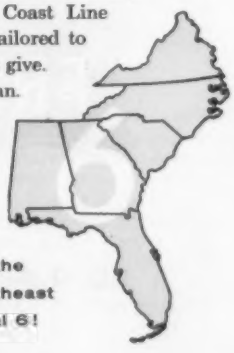
All but filling the photo above are the sprawling facilities of the world's largest kraft paper and board producing plant. It's Union Bag-Camp Paper Corporation's Savannah, Georgia mill — one of two mills operated by the company.

Its buildings alone occupy 46 acres, and enough electricity is generated on the spot to supply a city of 160,000. Daily, 3,500 cords of pulp wood go into processing 2,400 tons of kraft paper and board, which are converted at this and other company plants into bags and corrugated boxes. In all, eighty freight cars are required each day to move the kraft products and chemical by-products produced by the plant.

Whether it's providing day-in-day-out transportation for heavy bulk shippers or simply moving a one-shot load, Coast Line knows how to do it. What's more, our services are tailored to fit your individual needs. What you want is what we give. Call on Coast Line soon, and you'll see what we mean.

"Thanks for using Coast Line"

ATLANTIC COAST LINE RAILROAD



...serving the Southeast Coastal 6!

# SHIP IT ON THE FRISCO

Feed, flour or cereal . . .
refined or raw material – –
whatever you have to ship – – *big* or *small* . . .
*short* or *tall* . . . *fragile* or *rugged* – –
ship it ***fast*** and ship it ***sure***;
SHIP ***IT*** ON THE FRISCO!

To, from or through the Southeast and Southwest,
425 powerful Diesels and a fleet of 25,000 cars
speed your shipments to destination
safely, surely . . . on time.

Your freight arrives when you want it . . . reaches its
destination when it's due.

Call your FRISCO Sales Representative for that next
shipment. He'll show you why it's best
to *Ship **It** On the Frisco!*

FRISCO

5,000 MILES SERVING:

## ORE RATE CUTS

*(Continued from page 10)*

Soo Line, however, contends that a large part of the Gogebic ore—70% or more—moves to eastern lake ports and that Soo's rate cuts via Ashland will give it an edge of eight cents per gross ton on that part of the business. C&NW says the distribution of the traffic is hard to estimate because port assignments are often made as the boats are en route.

### *Dock Facilities Cited*

Soo Line points to use of the relatively modern concrete dock at Ashland (owned by Soo) as one factor in the Lake Superior port's favor. North Western, however, says it's considering installation of infra-red ore-thawing equipment and construction of new mechanized dock facilities designed for conveyor handling of pelletized ore. C&NW Chairman Ben W. Heineman says the projects are still in the "think" stage—and the outcome will depend on a number of factors, among them the volume of ore anticipated and the availability of funds to make the improvements.

While North Western is holding out hope for improvements at Escanaba, Soo Line is promising "to do everything possible to keep the port of Ashland competitive . . . insofar as the shipment of iron ore is concerned." The 38-cent rate cut, Soo Line predicts, "should continue Ashland as an iron ore shipping port."

### *1,700 Jobs at Stake*

More is at stake, however, than the future of Ashland or the handling of ore by one or another of the two railroads. Both roads cite the plight of the mine operators in trying to keep the production of relatively high-cost mines competitive with the inflow of import ore. North Western says the rate cut "resulted after months of study . . . to find ways to prevent the eventual closing down and abandonment of operations in the Gogebic range as the result of competition by foreign ore." About 1,700 miners and related production workers are employed on the range.

Soo Line, however, isn't backing down in its determination to keep Ashland in the picture. Dock and other facilities represent a substantial capital investment, a spokesman for the road noted. And "it is imperative that the railroad industry cooperate with other segments of the economy in effecting the savings necessary to insure continued movement of Gogebic range iron ore through the Ashland dock."

## As the Publisher Sees It . . .

New Haven's President Alpert sponsored a luncheon March 18 to introduce Philadelphia's Mayor Dilworth to community leaders in New York. Mayor Dilworth told his guests that Philadelphia's experience with "Operation Northwest" (RA, July 13, 1959, p. 29) on a limited scale had proved riders could be brought back to public transportation. The city's network of railway, rapid transit, and bus lines could be completely modernized for $175 million. Modernization would include all new equipment, ample parking areas, physical connections between rail and subway lines, and new and relocated stations where needed. Such a system, Mayor Dilworth believes, would assure the growth and development of the downtown area.

Although the $175 million is not easy to come by, a 30-mile highway bypassing downtown Philadelphia is being completed at a cost of $300 million—90 per cent paid by Uncle Sam. Mayor Dilworth has not suggested an outright subsidy for rapid transit, but does feel the government should make long-term low-interest funds available to municipalities for this kind of work, which would check the deterioration of urban districts.

Interestingly, Mayor Dilworth points out, Philadelphia businessmen would invest as much as $500 million of private capital in downtown development if transit improvements of this kind were made.

Clearly, if the city's heart is to remain healthy, the arteries that serve it must be healthy, too. Continuing to pour public funds into highways, with no parallel concern for transit needs, is hardly the answer.

Robert E. Lewis

# C&NW Fare Boost Suspended

The Illinois Commerce Commission has handed Chicago & North Western a stunning reversal by suspending a fare increase that sailed through an examiner's hearing with practically no opposition. C&NW, with $5,600,000 worth of new equipment recently placed in service and another $21,000,000 tied up in additional orders, may have to stay on the hook for up to 11 months before getting a decision on the hike.

In the meantime, the road faces loss of about $75,000 a month in additional revenue (based on the requested 7½% increase applied to North Western's present average $1,000,000-per-month suburban gross).

Protests against the increase apparently began going to the commission shortly after the examiner closed the hearing. One report said the commission received about 200 form letters.

The form letter charges that "since the last increase December 1958 we have had nothing for the increase except being delayed daily on the inbound and outbound trips of anywhere from five minutes to an hour and the service is much worse since push-pull trains have come into being.

"Therefore: if this matter should go to a public hearing please inform the undersigned so as protest may be lodged either in person or by councel (sic)."

C&NW management, committed to a multi-million dollar modernization of its entire operation, had no comment.

### Damage Evidence

Photographs of damaged freight are helping a lot of companies to spot—and eliminate—the causes. Cessna Aircraft Co., Wichita, Kan., mails photos like this to the shipper, with a diplomatically-worded letter, when the fault appears to lie in the packaging; to the carrier, if the damage seems to have occurred in transit.

# "I am a Burlington Man"

• Coordinated rail-highway service combines the speed and economy of the railroad with the flexibility of truck transportation—providing the most efficient handling for many products.

That's why the Burlington has pioneered in "piggy-back." This is a *service* organization, intent upon serving its customers with the most modern transportation facilities.

Today, this railroad provides direct rail-highway service to more than 1200 points. Its subsidiary, the Burlington Truck Lines, operates over 2,500 pieces of equipment. Burlington schedules, both rail and highway, are designed for shipper convenience and operated with dependability.

This is a truly great transportation system. So, of course, I'm proud to say,

***"I am a Burlington Man!"***

Burlington Route

CHICAGO, BURLINGTON & QUINCY RAILROAD
COLORADO AND SOUTHERN RAILWAY
FORT WORTH AND DENVER RAILWAY

**BURLINGTON LINES** · *Everywhere West*

## N&W, NKP Talking Merger

Mergers and rumors of mergers continued to make news last week. The ink was hardly dry on the Soo Line-Wisconsin Central-DSS&A merger plan (RA, March 21, p. 9) when:

- The Norfolk & Western (which merged with the Virginian last Dec. 1) disclosed that it was conducting "talks" with the Nickel Plate.
- Pennsylvania President A. J. Greenough let it be known that the Pennsy (whose merger talks with the New York Central collapsed last year) still has the door open.

First word of the N&W-NKP talks was made public Friday, March 18, when N&W President Stuart Saunders issued a cautiously-worded statement:

"We have given consideration to the possibility of mergers with several railroads. From time to time we have had discussions with the Nickel Plate about this and these talks are continuing. A Nickel Plate-N&W merger is wholly speculative at the present time and it is too early to say what, if anything, will develop."

Lines of the 2,719-mile N&W and the 2,170-mile NKP don't connect at any point, although both have extensive operations in Ohio. The Detroit, Toledo & Ironton was being mentioned prominently last week as a possible bridge between the merger-minded pair.

News of the N&W-NKP talks came a few hours after PRR President Greenough, addressing the New York Railroad Club, issued a "merge or else" warning.

"Our industry must face up to the simple fact," asserted Mr. Greenough, "that there are just too many railroads in the country today for their own good and for the public's good, and that mergers and the consequent elimination of duplicate facilities and wasteful competition . . . are the only solution."

He added: "The Pennsylvania has no present plans of a specific nature —however, our door does stand open; and I think that as the many important benefits of successful mergers become more apparent, a great many more doors will be open—because, collectively, they are, in my opinion, the doors to a real and growing future for our industry."

# Presidents Stress Merger Need

► **The Story at a Glance: Railroads continue to chalk up impressive gains in technological progress and operating efficiency; and they are presently making new progress in competitive pricing and service.**

**Rewarding as these things are, new breakthroughs are urgent. The industry may have as little as five years in which to assure its future as private enterprise.**

**Four railroad presidents spelled out the challenges — what railroads must do, internally and externally—at the annual "Presidents' Night" meeting of the New York Railroad Club.**

"Every railroad man," said Atlantic Coast Line President W. T. Rice, "has a story to tell, and if he doesn't do it he's not doing his job." It's time, he added, for "all 800,000 of us to stand up and speak our piece."

In New York March 17, Mr. Rice and three other railroad presidents stood up and spoke their pieces—and spoke them well. Their underlying theme: survival.

Mr. Rice pinpointed a problem common to all railroads: the need for basic public understanding and approval. The other speakers — Pennsylvania President A. J. Greenough; Pittsburgh & Lake Erie President John W. Barriger; and New Haven President George Alpert—dealt with specific problem areas.

For the PRR president, the "crying need for more mergers" was most pressing (see above). Pittsburgh & Lake Erie President Barriger gave equal priority to consolidation and modernization of working rules.

Mr. Barriger warned bluntly that the railroads, in order to survive as private enterprise, must make "revolutionary readjustments quickly."

"Survival," he said, "is dependent upon making a simultaneous breakthrough to new peaks of operating efficiency, service standards and competitively successful pricing. Only if notable achievements in these respects can be accomplished within five years or less, will the railroads be able to remain in their present status of private enterprise systems."

Mr. Barriger went on to describe the kind of breakthrough he is looking for. Through consolidation and work-rule modernization, he said, the railroads should be able to "offer long-haul transportation for as little as one-half cent per ton mile for heavy loading commodities moving continuously in large volume. Something in the neighborhood of two and one-half cents per ton mile should represent about the highest rate published in any tariff, except for the short haul, light loading, hazardous or extraordinarily valuable items of freight."

He added: "The 50% increase in traffic that would follow what I call, for want of a better term, 'wide scale functional reorganization of railway operation' would more than offset the job losses that might result from consolidation and modernization of [railroad] working rules."

A major external problem confronting the industry—one-way government subsidies—was underscored by New Haven President Alpert.

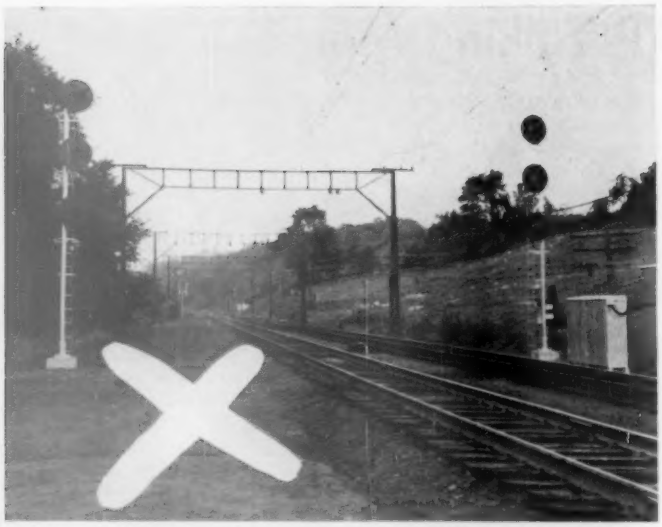
Mr. Alpert noted that during his whole tenure of office he has been advocating relief from taxes and some form of subsidy for passenger service. "I'm opposed to subsidy in principle," he said, "but in fact you have to deal with practical considerations."

He pointed out that the new Commerce Department transport study (RA, March 21, p. 31) wants subsidies for local airlines to be based on local needs, yet says in the next breath that local urban transportation is an essentially local problem.

"Why is it," Mr. Alpert asked, "that they talk one way in the case of the railroads and another way in the case of feeder airlines?"

He said Allegheny Airlines will be coming into New Haven territory on April 12 with a federal subsidy that last year amounted to $3,300,000 for its 500,000 passengers—or $6.77 per passenger. And, he added, the CAB says Allegheny is entitled to a 12½% return on its investment.

Noting that some of his fellow presidents opposed his position on subsidies because they see them "as the first step toward nationalization," Mr. Alpert commented: "The airlines have been subsidized since Kitty Hawk, and they're not nationalized and never will be."

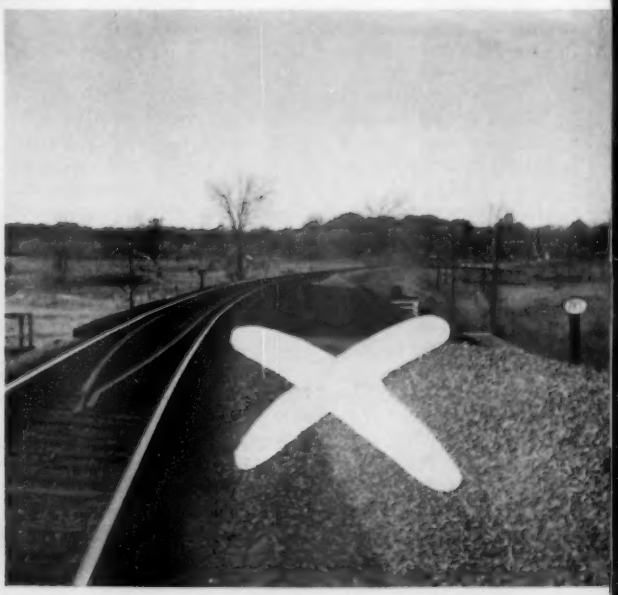


# TAKE UP

•••

CENTRALIZED traffic control is much more efficient than older methods of train operation. cTc increases track capacity so much that, in many instances, double track is no longer necessary—and single-track lines need fewer sidings.

Excess track is a needless expense. Remove it and you save on maintenance, taxes, and payrolls. Salvaged rail, switches, ballast, and ties can be used elsewhere—help pay for the cTc.



# ~~TRACK~~ and SAVE with GRS cTc

GRS offers cTc to suit your needs. You can have an all-relay system for the average installation and for simplified cTc on light-traffic lines. Or you may need Syncroscan®, the electronic cTc, ideal for dense traffic and extended mileage. With a GRS Traffic Master control center, you can have one-man pushbutton operation of hundreds of miles of railroad.

Consider GRS cTc along with your track program. Ask for complete information.

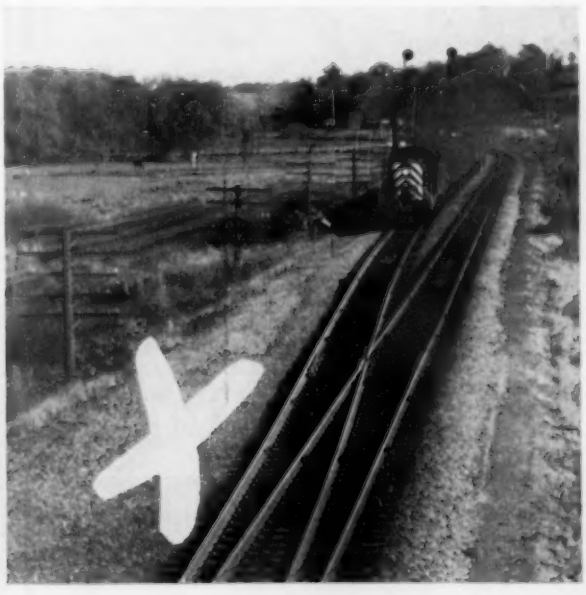
| SOME ACTUAL TRACK SAVINGS FROM GRS cTc | |
|---|---|
| Installation Length | Track Removed |
| 137 miles | 48 miles |
| 82 miles | 10 sidings |
| 167 miles | 85 miles, 35 switches |
| 133 miles | 8 sidings, 15 switches |
| 163 miles | 4-track to 2-track |
| 19 miles | 12.6 miles |

**GENERAL RAILWAY SIGNAL COMPANY**

ROCHESTER 2, NEW YORK

NEW YORK 17 CHICAGO 1 ST. LOUIS 1

2999



# A NEW ERA

TOLEDO, PEORIA & WESTERN RAILROAD COMPANY

Fellow Railroaders:

February witnessed the completion of an event which has been long contemplated and hopefully anticipated. Agreements were signed transferring ownership of Toledo, Peoria & Western Railroad Company to the two largest railroads in the United States, Atchison, Topeka & Santa Fe Railway Company and Pennsylvania Railroad Company.

It is well known to railroad men, shippers and the general public that this consummation was completed only after many months of examination and hearings by federal bodies, climaxed in a favorable opinion delivered by the Supreme Court of the United States.

J. Russel Coulter

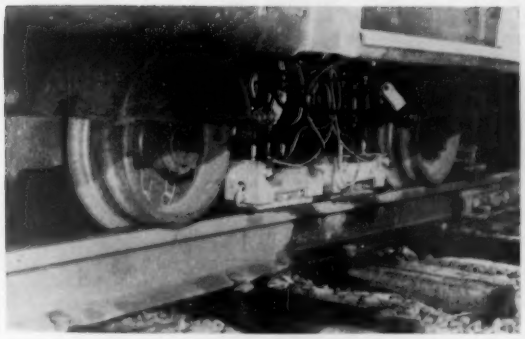
We wish to thank shippers for their support during these hearings and for the continued flow of shipments "via T.P.&W." We feel that shippers particularly appreciated the testimony of the two purchasing railroads that T.P.&W. "will continue to be operated as a separate and independent carrier with responsible management located along its line" . . . and that "existing routes and channels of trade via T.P.&W. will be maintained and kept open without discrimination between connecting lines of railroad."

And the gain of this important transaction goes even further. Now that T.P.&W. is owned by the nation's two largest railroads we will have available to us their financial strength, their supply of freight cars, their technical know-how, their motive power in an emergency, their support for rate proposals and the support of their industrial development departments, secondarily to soliciting location of their own lines.

All evidence points to the beginning of a new and still greater era for T.P.&W. resulting from an ownership change that is overwhelmingly "in the public interest".

J. Russel Coulter

J. Russel Coulter
*President*



## New York City Subways Use Ultrasonic Rail Tester

New rail-test car developed by Sperry Products Co. (RA, Feb. 29, p. 64) for use in the New York City subway system represents a departure from the induction current used in other Sperry Rail cars to probe for rail flaws. It uses instead an ultrasonic (high-speed sound) wave reflected back from rails to recording equipment in the car. Rail defects break the sound-wave patterns. Business end of the system rides directly above the rails. Three separate ultrasonic search probes send high-frequency impulses into the rail at different angles. Tape recorders examined later by Sperry technicians show both the type and location of defects. Self-propelled, the new car is expected to traverse the 723.4-mile subway network completely every three months.

# C&O Gains vs Private Transport

Chesapeake & Ohio, and other railroads, in recent weeks, have scored two important victories in the continuing battle of all common carriers against the constant threat of private transport.

One involves recapture from rail-river-rail to all-rail movement of coal from West Virginia to Ohio; the other, recapture from highway to rail movement of perishables from Florida to West Virginia.

Effective on or about April 1, Armco Steel Corp. plans to begin all-rail movement of coal from West Virginia to its Ohio plants. A Huntingon, W. Va., produce company has announced sale of private trucks and reversion to rail shipment for Florida perishables.

The Armco traffic involves annual movement of about 1,400,000 tons of coal—mostly metallurgical, for coking purposes—from company mines at Montcoal and Robinhood, W. Va., to plants at Middletown and Hamilton, Ohio. The coal in question formerly moved to Huntington via the C&O; from there to Cincinnati by Armco's private barge line; and from that point to destination over the Baltimore & Ohio or the Pennsylvania. C&O and Armco sources attribute the shift from rail-river-rail to all-rail movement to two major factors:

1) A reduction of 60 cents per ton from the former all-rail rate between Armco's West Virginia origins and its Ohio destination.

2) Obsolescence and necessary replacement of Armco's 20-year-old river transport facilities. "Our need of new river equipment was definitely a factor in our change in transport methods," says R. W. Kelly, Armco's general traffic manager, "but it's one that makes it hard to estimate savings. Ours was an individual case. There was no other comparable movement on the Ohio river."

That some overall economies are expected seems apparent, however, from a statement attributed to Armco's vice president and general manager, C. G. Davies: "While the railroads have lowered their charges, the cost of river transportation keeps going up steadily" (RA, Feb. 15, p. 48).

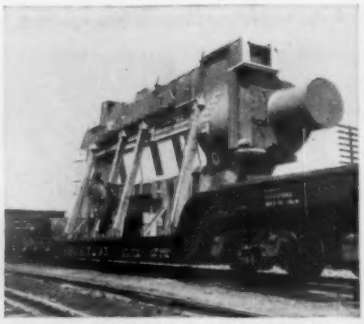
Mr. Kelly calls attention also to the fact that the "lowering of rail charges" (justified by Armco's volume) has benefited other consumers of non-metallurgical coal—such as public utilities and paper companies—in the Hamilton-Middletown area.

Economy was definitely the controlling factor in sale of its long-distance trucks, and shift to rail movement, by Narcise Products, Inc., a Huntington produce firm. Figures quoted by Luigi Narcise, owner of the company, showed private trucking to be more than two and one-half times as expensive as rail movement. From Homestead, Fla., to Huntington, 1,240 miles, truck cost was 30 cents per mile; for a round-trip, $744, including gasoline, oil, highway tolls, repairs, insurance, depreciation, etc. Rail charges, for a comparable shipment, are only $294, Mr. Narcise recently told the Huntington chapter of C&O's Better Service Conference. Only exception in the company's policy of reverting to rail transport, Mr. Narcise added, will be highly perishable vine-ripened tomatoes.

## Revised Solid Bearing Becomes Standard

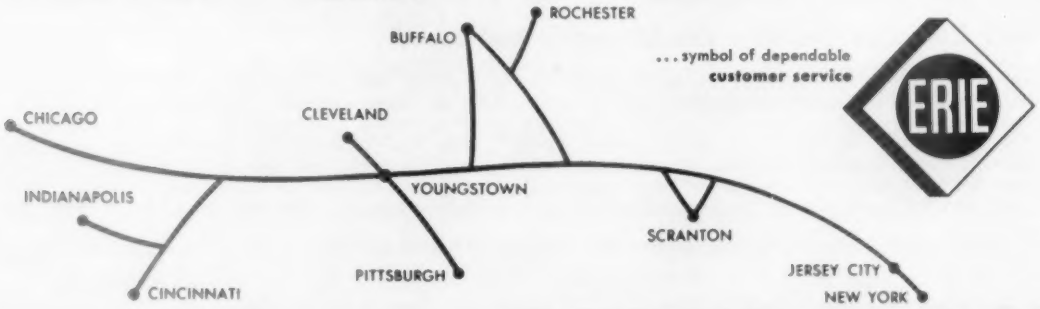
Member roads, by special letter ballot, have approved the revised standard solid journal bearing design, according to the AAR Mechanical Division. Manufacturers having facilities available are to arrange to produce the bearings immediately. The deadline for the production of the new bearing by all manufacturers is July 1, 1960. In the same letter ballot, the revision of roller bearing Grease Specification M-917-56 to include procedure for determining rust preventive properties is effective immediately. Under the third proposition included in the ballot (alternate standard 70-ton hopper-car design), railroads having a complete set of drawings may start construction now. A complete set of drawings will be included in the Supplement to the AAR Manual about May 1.

PIGGY-BACK trailers ride special king-sized Erie flats for faster, safer door-to-door service.



DEPRESSED CENTER FLAT CARS take the big loads, add more clearance inches to Erie's famous high and wide route.

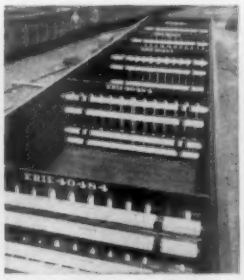
DF CARS like this one equipped for automobile parts are available for many purposes.



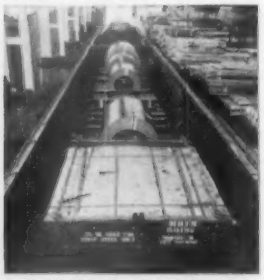

...symbol of dependable **customer service**

ERIE

COVERED HOPPERS carry animal feed, salt, cement, chemicals and numerous other commodities.



ELECTRODES move damage-free in this special car.



FLAT ROOF GONDOLA CAR protects coiled strip, flat sheet and other commodities requiring weather protection.

*Fitted to your needs for safer, more efficient transportation*

# ERIE PRODUCT-DESIGNED EQUIPMENT

An important **customer service** of your local Erie representative is working with you to analyze your transportation requirements. And if your products can be handled more economically, or shipped more safely, using special equipment such as that shown here, he'll be the first to recommend it.

In fact, the wide variety of special Erie cars includes a number that were designed and developed through the teamwork of Erie men and their customers.

Fitting your shipping needs with more efficient, specially-designed equipment is another example of the kind of complete **customer service** you can count on when you "Route it Erie". To see **customer service** in action, call your Erie representative the next time you ship to or from the important industrial area served by the Erie.

# Erie Railroad

*Dependable Service For The Heart Of Industrial America*

# TOFC Lures Autos Back to Rails

► **The Story at a Glance: Traffic in new automobiles, long absent from the railroads, is returning to them rapidly and widely.**

**The reason is piggyback, which began (for autos) on the Pacific Coast only 18 months ago; has spread like wildfire to nearly all parts of the United States.**

**Here's a summary of brief telephone interviews in which four automobile company traffic men tell a Railway Age editor:**

- **How they use piggyback;**
- **Why they like it; and**
- **What they think of its future.**

**Where do you use auto piggyback?**

*E. S. Knutson, director of traffic, Ford Motor Co.:* From the Detroit area to all parts of the country except the East; also from our assembly plants in Louisville, St. Louis and Kansas City.

*G. D. Cron, traffic manager, Chevrolet-Oakland (Calif.) division, General Motors Corp.:* From Oakland to other points in California, and also into parts of Arizona, Nevada, Utah, Idaho, Oregon and Washington, either now or later.

*R. T. Fick, manager, traffic and transportation, Studebaker-Packard Corp.:* From South Bend to the West Coast and the Southeast—Florida.

*P. G. Fritzsching, Jr., director, corporate traffic office, Chrysler Corp.:* From Detroit to St. Louis; from those points to the Southwest via Tulsa, Okla., and Dallas and Floydada, Tex.; from Detroit to the Southeast via Birmingham, Ala.; and from Detroit to the Northwest via Miles City, Mont., and Spokane, Wash. Cars moving from Detroit via St. Louis are generally reloaded there to get the proper "mix" to our dealers.

**What plans of piggyback, and what railroads, do you utilize?**

*Cron:* Plan II—the one where the railroad owns the equipment, furnishes the tractors and does all the work. Up to now, our operation has been limited to the Southern Pacific. You know, they call me "Mr. Piggyback" out here, because I think I started it back in 1958, but the SP went for it, hook line and sinker. Now everybody's in the act!

*Fick:* Plan V. Into the Southeast, we truck from South Bend to Latonia, Ky., use Louisville & Nashville to Atlanta, and truck from there to individual destinations. Westbound, we truck to Cicero, Ill.; piggyback over the Burlington and Rio Grande to Salt Lake City, and truck from there into Utah, Nevada and California.

*Fritzsching:* I'd prefer not to specify the plan, but we use the Wabash between Detroit and St. Louis and the Frisco beyond. To the Northwest, we've used the Milwaukee.

*Knutson:* We use both Plans III and V, over a good many different railroads.

**What is your approximate volume?**

*Fick:* Well, so far our operation is relatively small. We're just getting into it. In the last month, we piggybacked

(*Continued on page 52*)

**AUTO PIGGYBACK** is booming on roads as widely separated as the Southern Pacific (above); Milwaukee (cover); Wabash; Frisco; is gaining on others.

# 1,648 HYDRA-CUSHION CARS IN SERVICE THIS YEAR!

For safe, smooth movement of fragile freight, S. P.'s Hydra-Cushion car is one of the most thoroughly tested and successful in action today. Demand for it is shown by the fast-growing size of our Hydra-Cushion box car fleet.

In 1957 we developed and brought out the first 350 of these cars, with their unique hydraulic cushioning mechanism built into the car underframe. By the middle of this year, we'll have 1,648 in service.

## EXTRA PROTECTION FEATURES, TOO

In addition to Hydra-Cushion protection, each car is equipped with one of three *extra* lading safeguards:

DF DF LOADER INSULATED  Cp CAR-PAC LOADER INSULATED  C COMPARTMENTIZER INSULATED

These devices are systems of movable bulkheads or doors built into the box car's interior, to separate shipments for more convenient loading and hold them in place to prevent shifting and damage.

We're finding new applications as fast as we are new users, for Hydra-Cushion and its important contributions to "perfect shipping."

**We have also made Hydra-Cushion available to the railroad industry generally, through sale of manufacturing rights to Hydra-Cushion, Inc.**

## PERFORMANCE PROOF

A detailed check of 2,354 carload shipments of fragile products, such as glassware, appliances and other fragile commodities, showed that **Hydra-Cushion** delivered 97.8% of the shipments in good order, 81.4% in *perfect* order! This remarkable performance record is explained by the chart below—graphic proof that the Hydra-Cushion underframe car is an outstanding advance in freight car design to give fragile freight maximum protection.

| IMPACT (At 7 m.p.h.) | RECOIL | DRAFT GEAR (All cars 169,000 lbs.) |
|---|---|---|
| 660,000 lbs. | 140,000 lbs. | FRICTION DRAFT GEAR |
| 220,000 lbs. | 0 lbs. | *S. P. HYDRA-CUSHION UNDERFRAME |

*Note low impact shock plateau and absence of damaging recoil with the Hydra-Cushion underframe.

# Southern Pacific

TRAINS • TRUCKS • PIGGYBACK • PIPELINES

about 640 autos to the West Coast—at five to a trailer and 10 to a flat car, that's 64 railroad cars.

*Fritzsching:* This year, from Jan. 1 to date, we've shipped about 15,000 automobiles by piggyback.

*Cron:* Currently, around 3,000 to 3,500 autos a month.

**It seems to be rather generally believed that there's less damage when automobiles are piggybacked than when they are moved entirely by highway—that they reach dealers in better condition. What is your experience on this point?**

*Fritzsching:* The overall performance is definitely in favor of piggyback. There is certainly no more damage that way—and probably less—than by highway. Our cars get a much smoother ride by rail than they do by road. They are higher up, so there's less chance of damage from stones or dust. And yet there's no danger of their being hit, in winter, by low-hanging, ice-covered tree branches. The overall results are excellent.

*Cron:* There is much less damage by piggyback than by highway. It's a faster and a cleaner operation. When you consider the thousands of automobiles we've piggybacked, we've had very few claims.

Of course we do get a little damage now and then, but it's due to man-failure, or perhaps because the equipment isn't quite perfectly adjusted. It's still a new operation. We've got a lot of new people working on it. And it's all new equipment. The SP has—I think it's 100—trailers on order from Whitehead & Kales in Detroit and another 200 here in California. A fellow from Whitehead & Kales just told me: "We should have more time to experiment with some of these trailers, but you want them so fast we just have to build them and send them out and trust to luck everything will fit." So sometimes we do run into a little trouble in getting cars in the right position, and making the right tiedown, and finding out where the bad spots are. We don't always get them all, and then we may have a little damage, but it doesn't compare with highway damage, and I think it can be eliminated entirely when people get better acquainted with the job and the equipment. I'm working on that right now.

*Fick:* Our experience has been so brief, and we've moved so few automobiles, that we really couldn't give you a true ratio. Past performance, though, indicates that damage will be negligible, because it has been very low on what we have moved.

*Knutson:* So far, our damage by piggyback has been roughly about the same as by highway. We've had very little damage on the railways, and some of what has been incurred is chargeable to lack of experience by all parties in shipping by rail, and perhaps also, in some cases, to incompatible equipment. It's something that can probably be overcome as people doing the work get more familiar with the equipment, and perhaps as the equipment itself is improved a little bit.

**Before piggybacking, do you use any special techniques designed to minimize damage?**

*Knutson:* No. We don't prepare autos any differently than we would for highway transportation. For some long-distance moves, we cover the cars, both by rail and highway, but that's all.

*Fritzsching:* No. Cars to be piggybacked aren't covered or coated or given any other special preparation. They are treated just like cars which are to be trucked.

*Cron:* We do hand-spray a light coat of wax on cars which are to be piggybacked. We started that in case diesel oil from the locomotive flew back on the autos. It did in some cases, but it wiped right off without doing any damage. So I don't think the wax spray is absolutely necessary, but our people feel it may help to preserve the paint while the cars are out in the open, so we use it. It's easy and not very expensive, and anyway we have a future program for automatic spraying of all our cars.

**What, if any, problems have you encountered in piggybacking?**

*Cron:* We still don't have enough equipment. As I said, I understand the SP has 300 trailers on order, and they will help, but we would have gone ahead with it even faster than we have if equipment had been available. Otherwise, I don't think there's really anything except perhaps the minor personnel and equipment problems which I mentioned, and they will be ironed out in time.

*Knutson:* Equipment is sometimes a little bit incompatible, and some personnel isn't too familiar with it. But that should be overcome.

**What do you think about the future of auto piggyback?**

*Fick:* From our limited experience, it appears that this form of transportation, which utilizes the inherent advantages of both rail and truck operation, will provide a more efficient method for us to use in shipping automobiles to dealers and parts to parts depots.

*Knutson:* We contemplate piggybacking autos to the East also, in the near future. One of the things that's likely to move us into the East is the New York Central's auto Flexi-Van operation, and then there are some rates that are not yet available to us.

*Cron:* Our only program for the future is to make it 100% piggyback. We're doing it as fast as we can get trailers. What we are anxious to do is to give our dealers all store-door delivery. I think it's the coming thing. I'm very enthusiastic about it. I feel it's the best method that's been developed to date, and it can be damage-free—even below box-car damage, and that hasn't been too high on autos. Personally, I prefer piggyback to that big 16-auto car, because that involves double handling. It may be all right for long-distance hauls across the country, but I don't think it's practical for movements up and down the Coast, within a radius of 1,000 or 1,500 miles.

*Fritzsching:* Overall results to date are excellent. We believe the piggybacking of autos will continue to expand, but we think it may be an interim operation. That will depend on the ability of the railroads to work out procedures and equipment, and in some areas on the time required to develop double- or triple-deck cars holding 10 or 12 autos.

[*Editor's Note:* Two prototypes of such cars have been built—one by Pullman for the Frisco, and one by the Santa Fe. The Pullman car, 83 ft long, takes 12 standard or 15 compact autos in three tiers. The Santa Fe model is an anticipated forerunner of an 88-ft car which will take up to 15 autos. Also under consideration is a removable superstructure which will convert a standard 85-ft piggyback car into a bi-level auto car. At an estimated $10,000 cost, plus $15,000 for the car, this would provide a somewhat less expensive and more versatile vehicle than the triple-decker. But there'd be the problem of getting the superstructure back to the point of origin.]

•

**What do railroads think of auto piggyback?**

Says J. E. Gilliland, vice president (traffic) of the Frisco, which is currently hauling from 8,000 to 10,000 autos a month under Plan V:

"We love it!"

At Chicago and North Western we are now able to make delivery commitments that might have seemed foolhardy a short time back. That is because of the electronic wizardry of "Car-Fax". . . an automatic traffic reporting system that quickly fingers any car, any time, anywhere on our lines at your request.

But "Car-Fax" alone isn't enough. That's why we are backing it up with a multi-million dollar freight car program. The record: In 1959 alone we put 5,914 new and rebuilt cars into service . . . and you can count on thousands more to come this year.

For people like this manufacturer and others whose production and profit depend upon precise, safe deliveries . . . the forward thinking at C. & N.W. Ry., hand-in-hand with positive action, means real progress toward the goal of perfect shipping every day of every month.

The CAR-FAX Route

# CHICAGO AND **NORTH WESTERN** RAILWAY

# RRs Can Regain Steel Traffic

► **The Story at a Glance: To regain a substantial share of finished steel traffic, railroads must provide:**

- **Specialized equipment — hooded gondola cars or better;**
- **Consistently dependable service; and**
- **Rates which will give shippers a lower over-all cost than they can obtain by highway.**

**That's what R. N. Shields, president of the Pittsburgh & West Virginia, told two Railway Age editors in a brief interview on March 16.**

Since the end of last year's steel strike, railroads have been hauling an estimated 20 to 25% of finished hot and cold rolled steel sheets. But some of that is "overflow" traffic moving by rail because there aren't enough steel-hauling trucks to carry the heavy volume of sheet being produced. When things "simmer down" to normal, railroads are likely to be cut back to the 15% they were handling last spring; may even be down to around 12%.

To reverse the trend, P&WV President R. N. Shields tells Railway Age, will require a combination of three steps.

- Railroads must furnish an adequate quantity of specialized equipment, to reduce to a minimum the cost of blocking, bracing and wrapping. So far, the best answer—not necessarily the final one—is the hooded gondola, or coil car, with built-in blocking and weather protection. P&WV has 51 such cars; would like twice as many. They are basically profitable—but are expensive; are one-way, one-commodity vehicles; can't be allowed to stand idle for long periods of time.
- Railroads must provide dependable origin-to-destination service. It needn't be exceptionally fast, but has to be reliable so receivers can maintain production schedules.
- Railroads must offer rates which will give shippers and receivers an over-all cost equal to or lower than truck cost.

The rate-cost factor appears to be the crux of the problem.

Many steel-hauling trucks are owner-operated, under arrangement with a "broker" who holds the necessary ICC rights; frequently operate at rates which take no account of depreciation or replacement cost. Limited to steel hauling, the trucks themselves carry permanent dunnage, protective tarpaulins, which the owner-driver adjusts without cost to shipper or receiver.

In a conventional freight car, by contrast, the shipper has to install blocking and bracing, at $50 to $75 per car; has to wrap and "shroud" the load (for which the receiver pays) at $2 or more per ton. Even in a coil car, the shipper has to remove the hood, adjust the blocking, load the car and replace the hood—which, at equal rates, still gives the truck a total cost advantage.

Steel companies, by and large, are willing to overlook this, because they are set up for volume loading; and they like the free loading time allowed on cars under demurrage rules. On the other hand, receivers, especially the smaller ones, tend to prefer truck deliveries.

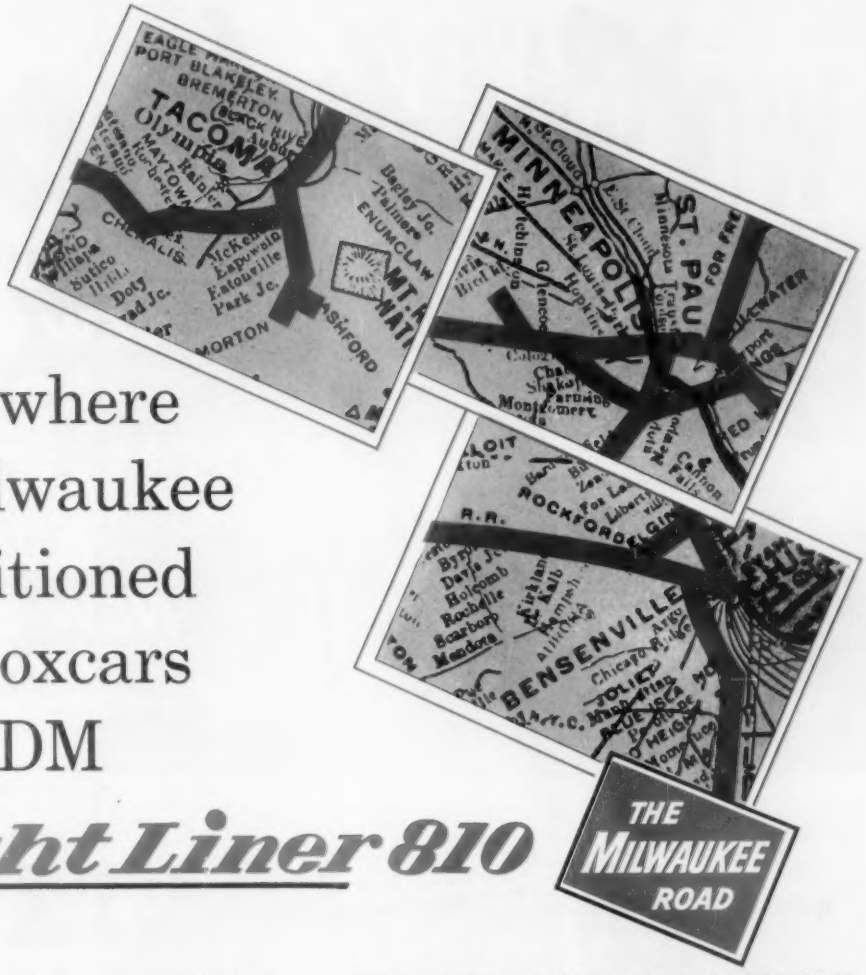
Trucks, Mr. Shields concedes, do give dependable service. At rates generally on a par with or lower than rail rates, they have a definite advantage in total cost. To overcome this, even with coil cars, railroads need a rate advantage of around $2 per ton.

How to achieve it? Possibly by minimum rates set by the ICC. Possibly by incentive rates on the general pattern of the Eastern railroads' new paint rates. They could be fully justified, the P&WV president says, on a cost basis, because steel is a heavy-loading commodity; is almost wholly damage-free when properly loaded and protected. Or the answer might conceivably lie in "agreed charges," provided they could be so worked out as to permit all railroads to share in the available traffic.

## Here's Another Weapon Against L&D

New products—results of research—are constantly joining the railroad-shipper arsenal of weapons for the continuing battle against loss and damage to freight. One of the latest is Monsanto Chemical Co.'s "Syton P," a colloidal silica antislip and antisoil coating for bag and paperboard surfaces.

The manufacturer claims that its use will substantially cut damage resulting from bag breakage or from slippage or shifting of loads during transit. Also, it is said to permit faster and easier handling of bags or packages during loading or unloading; allow greater utilization of warehouse space by higher stacking. Monsanto has a Technical Bulletin (I-172) describing the product.

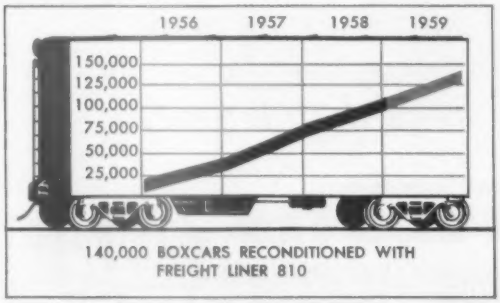



# Here's where the Milwaukee reconditioned 3,228 boxcars with ADM *Freight Liner 810*

THE MILWAUKEE ROAD

3,228 Milwaukee flour, sugar, and grain cars . . . reconditioned in the past two years with the fastest possible method—*ADM FREIGHT LINER 810*. Like 33 other major US railroads, the Milwaukee uses this fast, economical plastic and fiberglass product to help beat the boxcar shortage and to meet mounting demands for higher class cars.

With fleets over-burdened and shippers tightening their demands for more top condition cars, Freight Liner 810 will be doing an even bigger job this year. Freight Liner 810 helps to get bad-order cars back in service faster . . . to advance cars to higher classification. More roads will be repairing more cars with Freight Liner 810.




140,000 BOXCARS RECONDITIONED WITH FREIGHT LINER 810

It costs less in terms of time and material. With brief instruction, one man can recondition 15 cars a day . . . on any siding, in any weather. Freight Liner 810 covers stains, cracks, and gouges . . . encourages Class A lading. It's ideal for cars carrying flour, feeds, paper products, appliances, building materials, a wide range of materials.

So while tomorrow's advanced-design cars are being built, Freight Liner 810 will help you stretch your present fleet . . . bring it up to a standard that can operate satisfactorily with the cars of the 1960's.

Let us demonstrate on your siding—with no obligation—why the Milwaukee and other major roads apply Freight Liner 810. Write or phone for full information. Call FEderal 3-2112, or write to the address below.

**Archer-Daniels-Midland**

732 Investors Building—Minneapolis 2, Minnesota

ADM PRODUCTS: Linseed, Soybean and Marine Oils, Synthetic and Natural Resins, Fatty Acids and Alcohols, Vinyl Plasticizers, Hydrogenated Glycerides, Sperm Oil, Foundry Binders, Bentonite, Industrial Cereal, Vegetable Proteins, Wheat Flour, Dehydrated Alfalfa, Livestock and Poultry Feeds.

# Confidence

DECEMBER, 1958

**NEW** UNION PACIFIC FREIGHT HOUSE

KANSAS CITY, KANSAS

DECEMBER, 1959

**NEW** UNION PACIFIC FREIGHT HOUSE

PORTLAND, OREGON

MARCH, 1960

**NEW** UNION PACIFIC FREIGHT HOUSE

E. LOS ANGELES, CALIF.

**Confidence** in the indispensable service of railroads to the economy of our Country.

**Confidence** in the continued growth of the territory it serves.

**Confidence** in its ability to handle freight entrusted to it in a prompt, careful and efficient manner.

*These are the reasons why Union Pacific has spent $8,302,000 on these new facilities in a period of a little more than a year.*

**O. J. WULLSTEIN,** General Claims Agent

**UNION PACIFIC RAILROAD**

Perfect Shipping

*Be specific...ship UNION PACIFIC*

UNION PACIFIC RAILROAD

# 40° above to 60° below in 2½ minutes*

## ...WITH PURECO $CO_2$ "BLAST CHILLING"

The AFDOUS uniform code being adopted by both states and food chains requiring the maintenance of near zero temperatures for the handling and shipping of frozen foods, creates the need for additional refrigeration techniques.

**Pureco Blast Chilling gives quick "pull-down".**

Pureco carbon dioxide liquid sprayed into the truck or car reduces interior temperatures to sub-zero in seconds. The warm, moisture-laden air is flushed out and replaced with cold, dry vapor, preventing any "heat shock" from loading temperatures. Time consuming pre-cooling periods are shortened, and after loading pull-down periods of two to four hours are eliminated, resulting in savings in fuel and maintenance.

**No special equipment is needed.**

Pureco $CO_2$ *Blast Chilling* needs no special equipment . . . it works with what you now have . . . mechanical units, hold-over systems or "DRY-ICE".

**Have a trial Blast Chilling demonstration.**

Pureco would like to demonstrate *Blast Chilling* to you in *your plant* under *your working conditions* . . . with no obligation on your part . . . Pureco's Technical Sales Service will make the demonstration and provide any technical assistance you need to help solve your refrigeration problems efficiently and economically with Pureco $CO_2$. Call your local Pureco man for details or write to:

**Actual Pureco Test*

PURECO $CO_2$

**PURE CARBONIC**

Pure Carbonic Company, A Division of Air Reduction Company, Incorporated
Nation-Wide Pureco $CO_2$ Service-Distributing Stations in Principal Cities
General Offices: 150 East 42nd Street, New York 17, N.Y.

*AT THE FRONTIERS OF PROGRESS YOU'LL FIND AN AIR REDUCTION PRODUCT*

## ...it's routed **S.A.L.**

**Shippers to and from the thriving Southeast know and respect Seaboard standards of *service* and *dependability*. Electronically controlled yards, modern motive power and rolling stock, faster schedules — these are just a few examples of Seaboard progress.**

**Added to these is Seaboard's friendly personalized concern for your shipments — bound to produce an extra measure of careful handling. *Transportation is our business* . . . and "Perfect Shipping" is our *year-round* goal.**

***Now available—Piggyback service between the Seaboard Southeast and Northern cities.***

**SEABOARD**
**AIR LINE**
**RAILROAD**

THE ROUTE OF COURTEOUS SERVICE

# For longer lasting seals—*specify* WABCO® REPLACEMENT PARTS

Westinghouse Air Brake Company makes its own packing cups, gaskets, diaphragms, and other seals. *And, they are second to none!* They are major components of any brake equipment. And the recent extension in cleaning periods of AB brake equipment to 4 years, places increased emphasis on WABCO reliability. Integrity of brake operation through this period is assured by using only original WABCO replacement parts at C.O.T. & S. periods.

Genuine WABCO Replacement Parts are made on the same molds and under the same strict policy of Quality Control as were the seals in your original installation. *They are identical in every way.* Furthermore, each renewal part bears the date of manufacture molded into it . . . so you can easily keep an accurate record of the long, trouble-free service you will get. *Under normal conditions, dated WABCO seals should go through two or three service periods without noticeable wear or deterioration.*

To continue to get top performance from your air brake equipment, use only Genuine WABCO Replacement Parts.

Westinghouse Air Brake
COMPANY
AIR BRAKE DIVISION WILMERDING, PENNA.

## HOW SHIPPERS CAN CUT L&D (*Continued from page 17*)

marking. Several men, in fact, give about equal importance to both. George Ferguson, TM, Thompson Wire Co., Worcester, Mass., is one; T. C. Hope, GTM, Montgomery Ward & Co., Chicago, is another. "Modern accounting," says Mr. Hope, "tends to combine processing of invoices, production records, billing and shipping labels in one process. Labeling quality suffers. We should work toward restoring sensibility." Then he cites the case of a supplier who "uses a 1½-in. by 2-in. label with fuzzy typewriter addressing."

Messrs. Mitchell and Adams also stress proper marking, with the latter cautioning against use of dual marks.

5) *Follow AAR loading rules.* Those rules, and manuals explaining them, draw favorable comment from a good many Poll respondents. Birdsboro Corp., Birdsboro, Pa. (J. L. Miller, GTM) and Line Material Industries, Milwaukee (C. A. Marves, Transportation Department manager), make the AAR loading pamphlets available to shipping personnel, and report good results. Sharon Steel has its own loading manual. AAR packaging specialists get a pat on the back from Mr. Morton.

Sharon changes its packaging and loading practices when checks indicate they can be improved. August Heist, TM, R. J. Reynolds Tobacco Co., Winston-Salem, N. C., reports his company (*Continued on page 70*)

## Railroading After Hours with Jim Lyne

**MAIL CARRIER WHEN IT SNOWS**—Southern's Bernie Young has sent me a proof of an ad SR is publishing in on-line newspapers, calling attention to the dependability of its mail service during Dixie's recent Arctic-style weather. The ad shows a diesel-powered train whisking through the snow. The heading reads: *"Here comes your air mail (and your highway mail, too)."*

The railroads were able to handle the mail thus temporarily diverted back to them. But, SR points out, if regular mail traffic keeps on being removed from the railroads, the day may come when they'll no longer be able to handle all of the traffic diverted to them from planes and trucks "at the drop of a snowflake."

**WHERE RR TRAVEL SAVES MONEY**—Great Northern's publicist Dinty Moore has sent me a copy of GN's latest folder, comparing costs of travel on the "Empire Builder" with those of parallel air transportation.

The comparisons do not tabulate just the simple fares, but include the incidental costs as well (such as meals and sleeper by rail, and airport taxis for plane customers).

Round-trip St. Paul to Seattle-Portland by rail (meals and duplex roomette), including tax, costs $189. First-class air costs are $234. Rail coach, compared to air coach, saves the passenger $82.50 on the round-trip between these cities.

**WHERE RR RATES ARE HIGHER**—There are some routes in this country, of course, where air travel is cheaper than railroad service. Where railroads don't believe they can compete with air fares, I've often wondered whether they could not make sales capital out of their comfort and safety, dismissing their higher fares as incidental.

Luxury hotels manage to keep their rooms well filled—not only in spite of their higher charges, but perhaps partly because of them. The same's true of ocean vessels. I seem to recall back in the early days of the Santa Fe's "Chief"—when it wasn't even a daily train. As I remember it, the widely advertised slogan was: "Extra fine, extra fast, extra fare."

Money-saving, when it's there, helps sales—but it's absence doesn't necessarily prevent them. The only really first-class travel service in this country—by any type of transportation—is that provided in Pullmans on named trains.

**RAILROAD WRITING**—A little while ago I had something here about the decline in the volume of high-quality railroad fiction. Douglas Dean of Michigan Center, Mich., concedes the point—but believes the absence of quantity in fiction is more than compensated for by the high-type of railroad historical literature we're getting. He mentions, particularly, the V.V. Masterson book, "The Katy Railroad—and the Last Frontier," published several years ago by the University of Oklahoma press.

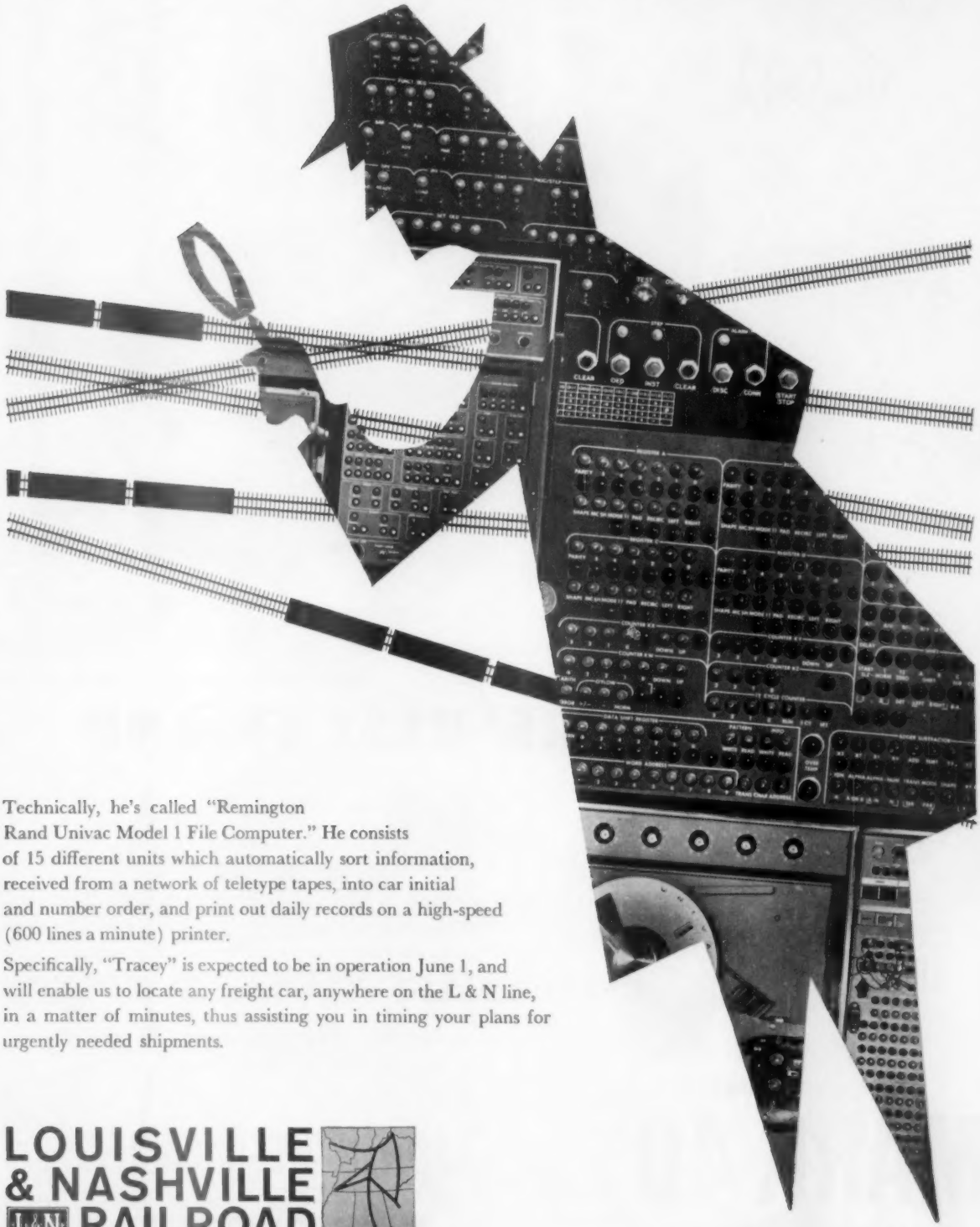
I agree, and could name some other good histories to go alongside the one on the Katy. Fictioneering isn't as easy with railroads under electronic controls, as it was when every train was pretty much an independent venture, like a ship at sea.

**SAVING THE CITIES**—Most urban planners have, at last, waked up to the understanding that too many highways and autos will kill off the big cities—and that the only salvation is to get more people to come by train instead of by highway. So far, these fellows are talking only about commuters—but a traveler coming into a big city by car from Podunk, 300 miles away, clutters up the city just as much as a commuter does who drives in from only 10 miles out.

All kinds of inducements are being suggested to keep rail commuting from drying up—all inducements, that is, except perhaps the simplest and most logical. This, of course, would be to require a commercial-type payment from each motor vehicle entering a city, which would fully cover all the costs incurred to accommodate it. One expert in this field favors the levying of fully compensatory toll charges (covering expense of streets, signals, policing)—the tolls to vary with the time of day. Charges would be higher during the rush hours and heavy trucks would (perhaps) be barred entirely, except at night.

What I'm getting at is this—that, in the national interest, it isn't just railroad commuter service that needs to be given an economic chance to live and grow; but the same applies to all railroad movement of people into big cities, whether short-haul or not.

# A "PRIVATE-EYE" NAMED "TRACEY"
## IS JOINING THE DIXIE LINE



Technically, he's called "Remington Rand Univac Model 1 File Computer." He consists of 15 different units which automatically sort information, received from a network of teletype tapes, into car initial and number order, and print out daily records on a high-speed (600 lines a minute) printer.

Specifically, "Tracey" is expected to be in operation June 1, and will enable us to locate any freight car, anywhere on the L & N line, in a matter of minutes, thus assisting you in timing your plans for urgently needed shipments.

**LOUISVILLE & NASHVILLE RAILROAD**
L&N
*The DIXIE LINE*

# RAILROADERS' BEST FRIEND

The Mark 40 is a higher capacity *friction* draft gear offered for standard pockets.

IT'S "WORKING FRICTION" . . . the friendly kind that helps cut down lading damage claims and car maintenance costs. You find it in the MARK 40—the amazing HIGH ABSORPTION, LOW REACTION *friction* draft gear. Developed by Cardwell Westinghouse, the MARK 40 has ample capacity to absorb heavy road and switching impacts, with low sill pressure. Fits standard 24⅝-inch pockets . . . has 3¼ inches of travel. These features make the MARK 40 friction gear the answer to today's heavier railroading requirements. No wonder it's the railroaders' best friend!

**WESTINGHOUSE**

# MARK 40

**FRICTION DRAFT GEAR**

**(A.A.R. CERTIFICATE NO. 35)**

## CARDWELL WESTINGHOUSE COMPANY

**332 So. Michigan Ave., Chicago 4, Illinois**
**Canadian Cardwell Co., Ltd., Montreal 18, Quebec**

# Fast!.....

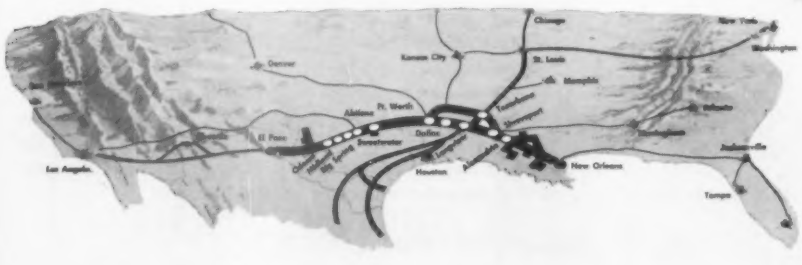
The T&P is fast on the draw when it comes to providing customers with:

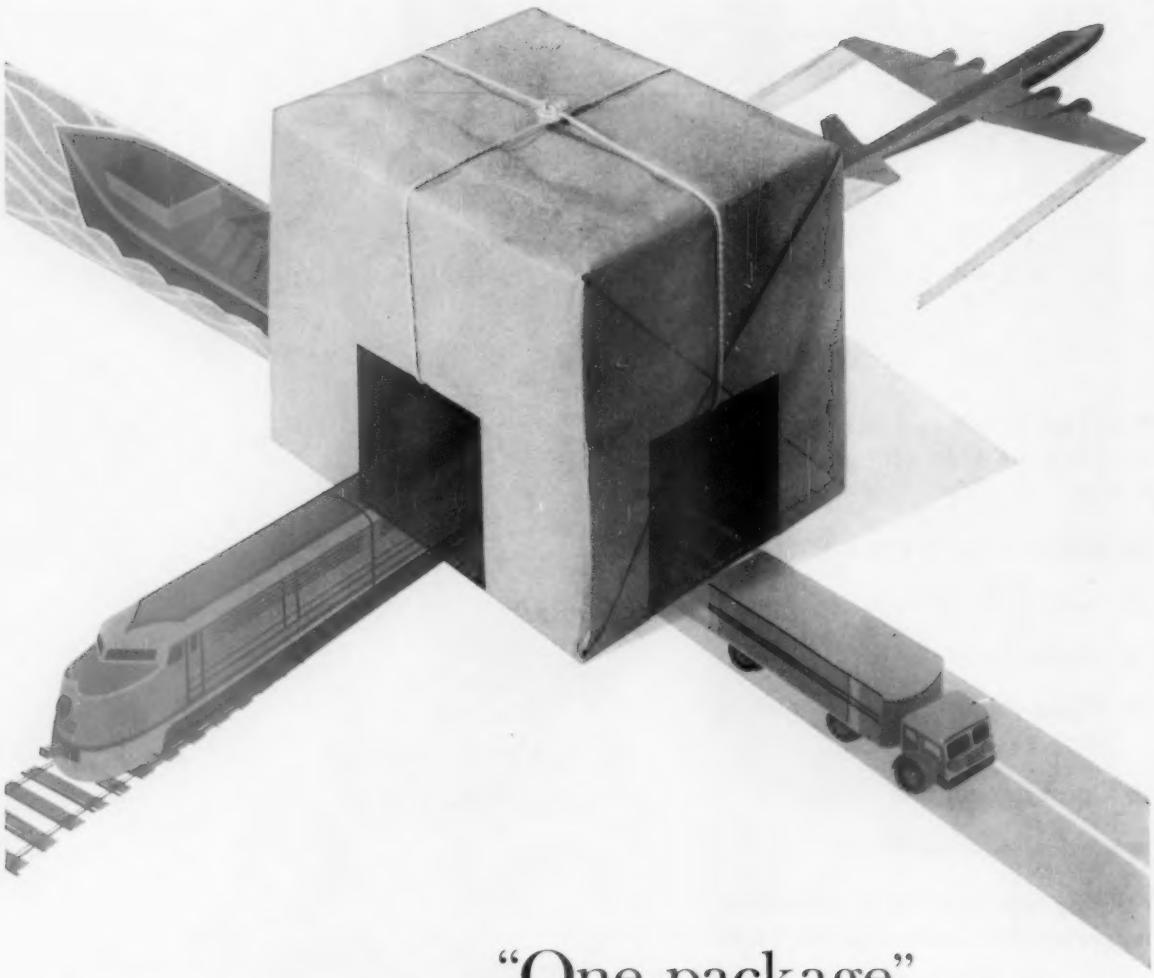
- ★ Specially-equipped freight cars
- ★ Piggy-back service
- ★ Special truck-rail service
- ★ Mile-a-minute through freight service
- ★ Quick car reports
- ★ Choice industrial sites

Helping you help your customers is *everybody's* business on the T&P!

Your helpful

**TEXAS AND PACIFIC RY.**





# "One-package" transportation— modern answer to a modern need

Shippers today often require a combination of transportation services to move goods rapidly with greatest efficiency and at lowest cost.

"One-package" transportation is a new concept that would allow any one carrier to provide a complete shipping service — including trains, planes, trucks, and vessels. Thus shippers could get just the transportation combination they need with a single call.

The public would also benefit — through better, swifter, more economical service.

Railroads want to offer their customers this "one-package" service. But they are not now permitted to do so. Their applications to engage in other forms of transportation, instead of being considered on the same basis as the applications of others, are generally subject to special conditions and artificial restrictions.

Shouldn't railroads be permitted — as their competitors are — to use the highways, airways and airports, and waterways which railroad taxes help build? This equality of treatment and opportunity would enable the railroads to provide shippers and the public alike with more efficient and complete transportation service at minimum cost.

**ASSOCIATION OF AMERICAN RAILROADS** • *Washington 6, D. C.*

PARTNER IN AMERICA'S
NEW GROWTH
SHOCK CONTROL
A SMOOTHER RIDE
EXW 10-8
EW 9-6
IL 50-6
IW 9-2
HOW SHOCK CONTROL DEVICE WORKS
During switching of box cars in freight yards, and in their movements en route, they are sometimes subject to impacts at A. The shock is reduced by the draft gear B as it travels along the floating sill C into the shock-absorbing unit D. At D the action of this ingenious high-pressure hydraulic cylinder absorbs the shock and prevents serious damage to the load from impacts up to 12 miles per hour. Spring E resets the device.

# *Box cars that "roll with the punch"*

They are called Shock Control cars.

Developed by Santa Fe, they have an ingenious hydraulic device that absorbs shocks and jolts and helps keep fragile merchandise free of damage.

Santa Fe now has 500 of these cars in service and is building 1,200 more of them in its shops in a constant effort to provide reliable and dependable service for America's shippers.

The Shock Control car-building program is part of a $60,000,000 investment that Santa Fe is making in new equipment and facilities this year to help meet the transportation needs of a growing America.

*Every Santa Fe Employe works for*

**Better Freight Handling**

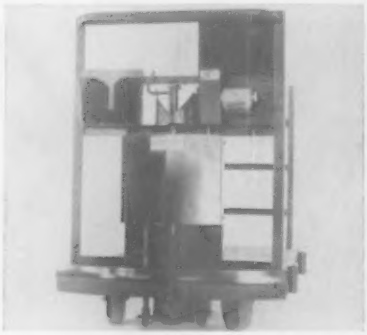
to be sure of

**"PERFECT SHIPPING"**

*Longest railroad in the U. S. A....*
*Always on the move toward a better way*

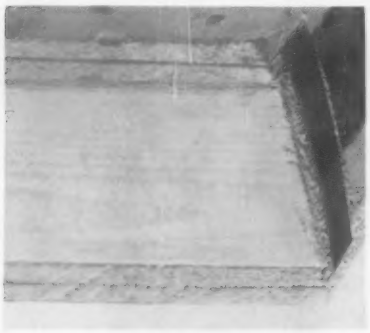
Santa Fe

# New Products Report



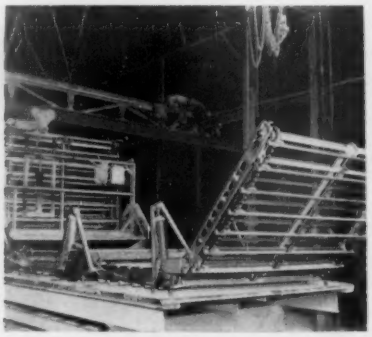
## Automatic Towline Cart

"S-Witch Cart" permits fully automatic, mechanically controlled routing of towline carts in freight terminals. Each vehicle includes a simple, inexpensive mechanical memory mechanism which allows carts to switch off towlines and accumulate at pre-selected points. First application is in Spector Freight System's new terminal in Brooklyn, N.Y. (RA, Feb. 22, p. 26). *SI Handling Systems, Inc., Dept. RA, P.O. Box 70, Easton, Pa.*



## Reinforced Pallet

The new "Super-Strip" wooden warehouse pallet is specially reinforced with ¾-in. by .035-in. plastic-coated, bendable and nailable steel strapping. It costs "a little more" than conventional pallets, but, the manufacturer says, "lasts more than twice as long." Other features of the new pallet are two- and four-way entry, and "no-snag" construction. *Signode Steel Strapping Co., Dept. RA, 2600 North Western Ave, Chicago 47.*



## Grain Unloader

What the manufacturer describes as "a new concept in equipment for high-speed unloading of bulk grain cars" will be on the market about June 1.

It involves a flexible mechanical conveyor, electro-hydraulically operated by one man. Suspended from an overhead monorail, the unloader is projected into a car after grain doors are removed. Folding conveyor wings as wide as the car interior, and separately actuated, extend into each end. Slat-type conveyors feed grain toward the door. When the car is empty, the wing sections are retracted and the unloader is backed out on its monorail suspension.

Counting time for spotting cars, removing grain doors and cleaning up residue, the new semi-portable "Superior" unloader is said to be capable of emptying four cars per hour, using two tracks.

Cost is estimated to run $25,000 to $30,000, installed, with no modification of plant facilities, trackage or conveying equipment being required. *Superior Separator Co., Dept. RA, Hopkins, Minn.*

## 'Non-Stick' Bag Lining

A multi-wall bag with a special "non-stick" silicone interior coating has been successfully tested in shipment and storage of tacky materials—rubber, asphalt, adhesives, candy, etc. The inert lining prevents adhesion between bag and contents; is colorless, odorless, and does not change appearance or basic characteristics of contents. *Olin Mathieson Chemical Corp., Packaging div., Dept. RA, 460 Park Ave., New York 22.*

## Load Holding Track

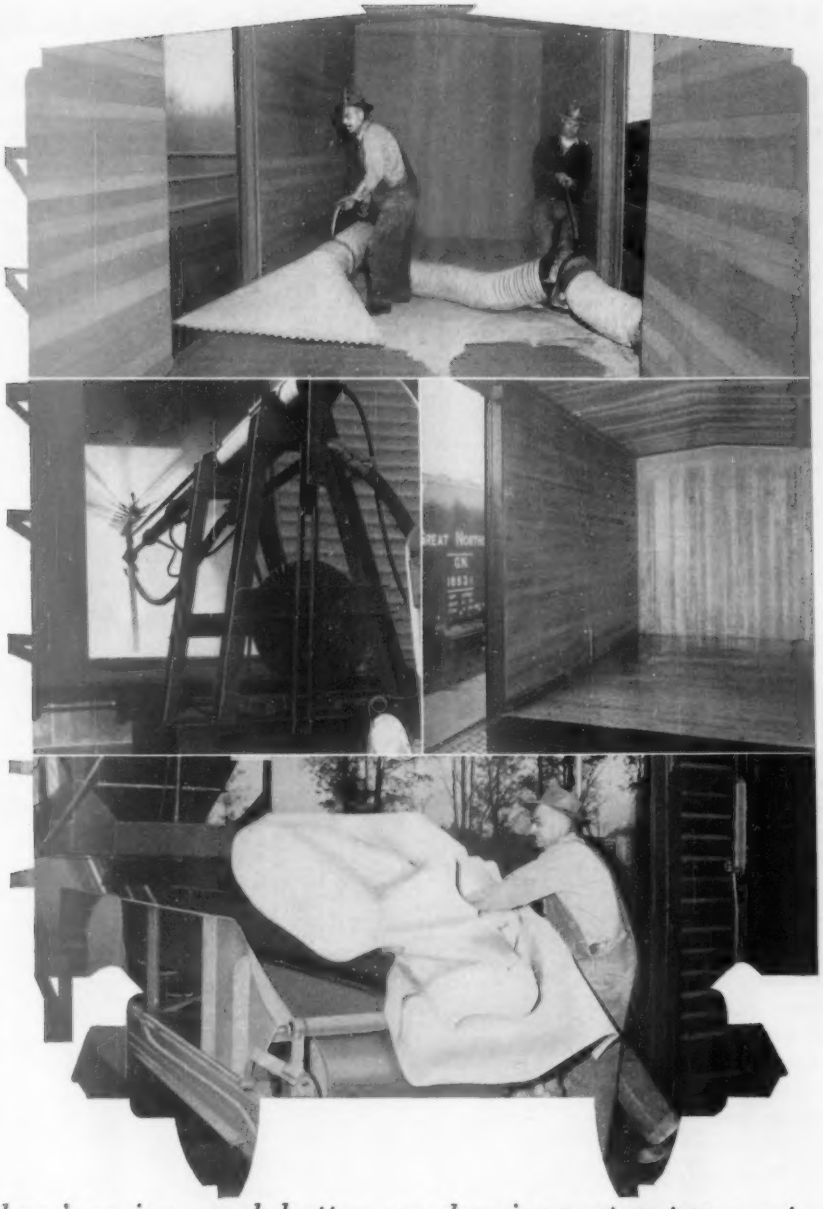
Series E Vertical Track, which attaches to a truck or trailer wall with simple wood screws, provides over 1,000 tie-off points per trailer for damage-proof cargo handling. Web straps, with new fast action buckles, can be put into or removed from the track with one hand. With other special fittings, the track can be used to install multiple decks for greater capacity. *General Logistics Div., Dept. RA, Aeroquip Corp., 2929 Floyd St., Burbank, Cal.*

## Hydraulic Car Shakeout

A new railroad car shakeout—the "H-R Trackside"—uses a vibrating head powered by hydraulic cylinder to loosen compacted or frozen material in either open or covered hopper cars. The shakeout is anchored in the ground, adjacent to the track, and is push-button controlled for safe remote operation. It is designed to handle the unloading of from one to 10 cars per day. *Hewitt-Robins, Inc., Dept. RA, Stamford, Conn.*

## Floor Covering

Deco Tread Mastipave, for use in terminals and on rolling stock, is manufactured with vinyl chips of several colors—sandalwood and beige chips in the terra-cotta Mastipave, and gray and green chips in the black. It is available in 1-yd by 30-yd rolls and in 9-in. by 9-in. blocks. Terra cotta Grip Tread style Mastipave is for slippery and dangerous floors. *Fibreboard Paper Products Corp., Dept. RA, 475 Brannon St., San Francisco.*



*Great Northern's unique push-button car cleaning system turns out...*

# 200 spic-and-span cars in just 16 hours

The "dirty box car" problem has plagued shippers and railroads for years. Great Northern has taken an important and progressive step toward solving this problem: construction of a unique mechanized car-cleaning system at Everett, Washington.

A six-man crew removes banding. Grain doors pass through a conveyor which flattens nails. Debris is loaded onto a conveyor and carried to an incinerator. A telescopic boom sprays the interior. Cars that need it are steam cleaned.

Result: 200 spic-and-span cars in just 16 hours—half the previous time required. Success of the system has led to plans for a similar unit at the eastern end of Great Northern's route. Push-button car cleaning—another progressive freight service from Great Northern.

GREAT NORTHERN RAILWAY

*Progress is a Great Northern Habit*

# Freight Operating Statistics of Large Railroads—Selected Items

| Region, Road and Year | Miles of road operated | Train miles | Locomotive Miles: Principal and helper | Locomotive Miles: Light | Car Miles: Loaded (*thousands*) | Car Miles: Per cent loaded | Ton-miles (*thousands*): Gross excl.locos & tenders | Ton-miles (*thousands*): Net rev. and non-rev | Road-locos. on lines: Serviceable: Unstored | Road-locos. on lines: Serviceable: Stored | Road-locos. on lines: B.O. | Road-locos. on lines: Per cent B.O. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **New Eng. Region** | | | | | | | | | | | | |
| Boston & Maine 1959 | 1,546 | 218,541 | 218,701 | 2,796 | 7,392 | 59.2 | 540,153 | 213,759 | 81 | .. | 29 | 26.4 |
| 1958 | 1,559 | 213,243 | 213,283 | 4,099 | 7,385 | 59.5 | 531,576 | 209,697 | 60 | 16 | 22 | 22.4 |
| N. Y., N. H. & Htfd 1959 | 1,739 | 248,984 | 249,530 | 16,261 | 8,689 | 61.7 | 589,085 | 234,399 | 63 | .. | 12 | 16.0 |
| 1958 | 1,739 | 238,509 | 238,519 | 14,840 | 8,817 | 60.6 | 599,414 | 234,070 | 70 | .. | 18 | 20.5 |
| **Great Lakes Region** | | | | | | | | | | | | |
| Delaware & Hudson 1959 | 764 | 165,239 | 167,318 | 2,587 | 8,021 | 64.9 | 587,767 | 303,154 | 30 | .. | 6 | 16.7 |
| 1958 | 764 | 164,975 | 167,435 | 2,836 | 7,490 | 59.8 | 561,292 | 274,790 | 35 | .. | 2 | 5.4 |
| Del., Lack. & Western 1959 | 941 | 221,746 | 228,089 | 11,843 | 9,239 | 63.3 | 658,092 | 278,842 | 57 | .. | 6 | 9.5 |
| 1958 | 918 | 232,533 | 239,072 | 14,425 | 9,412 | 61.6 | 670,595 | 279,190 | 54 | .. | 8 | 12.9 |
| Erie 1959 | 2,239 | 527,646 | 529,835 | 13,184 | 27,294 | 65.4 | 1,796,115 | 704,763 | 168 | .. | 6 | 3.4 |
| 1958 | 2,201 | 507,689 | 510,243 | 15,880 | 26,080 | 65.1 | 1,691,185 | 662,693 | 171 | .. | 3 | 1.7 |
| Grand Trunk Western 1959 | 951 | 195,740 | 196,336 | 1,442 | 6,122 | 55.5 | 473,687 | 179,229 | 41 | 8 | 20 | 29.0 |
| 1958 | 951 | 217,031 | 218,166 | 1,419 | 7,039 | 56.2 | 537,641 | 201,324 | 44 | 18 | 20 | 24.4 |
| Lehigh Valley 1959 | 1,114 | 190,850 | 192,905 | 6,028 | 7,863 | 64.2 | 551,869 | 251,930 | 32 | .. | 2 | 5.9 |
| 1958 | 1,116 | 188,665 | 190,946 | 3,447 | 7,903 | 63.1 | 553,710 | 247,595 | 29 | .. | 5 | 14.7 |
| New York Central 1959 | 10,333 | 1,962,424 | 1,972,910 | 85,004 | 80,897 | 55.7 | 6,604,427 | 2,815,282 | 424 | .. | 49 | 10.4 |
| 1958 | 10,447 | 2,097,741 | 2,106,989 | 86,193 | 79,836 | 54.0 | 6,249,719 | 2,678,411 | 450 | 1 | 52 | 10.3 |
| New York, Chic. & St. L. 1959 | 2,155 | 614,288 | 614,288 | 4,664 | 26,999 | 60.7 | 2,051,072 | 903,746 | 105 | 26 | 9 | 6.4 |
| 1958 | 2,155 | 589,753 | 589,753 | 4,376 | 24,476 | 60.1 | 1,831,203 | 787,057 | 100 | 31 | 5 | 3.7 |
| Pitts. & Lake Erie 1959 | 221 | 62,116 | 62,116 | .... | 2,443 | 62.4 | 232,153 | 137,757 | 16 | .. | 1 | 5.9 |
| 1958 | 221 | 49,842 | 49,842 | .... | 1,842 | 58.1 | 174,479 | 104,652 | 11 | .. | 3 | 21.4 |
| Wabash 1959 | 2,379 | 369,509 | 370,138 | 3,922 | 18,148 | 62.3 | 1,279,105 | 510,917 | 110 | .. | 5 | 4.3 |
| 1958 | 2,379 | 462,006 | 462,717 | 4,055 | 18,083 | 60.0 | 1,266,215 | 478,667 | 111 | .. | 3 | 2.6 |
| **Central Eastern Region** | | | | | | | | | | | | |
| Baltimore & Ohio 1959 | 5,795 | 1,370,976 | 1,466,142 | 101,267 | 57,858 | 56.5 | 4,746,350 | 2,257,832 | 384 | 40 | 28 | 6.2 |
| 1958 | 5,802 | 1,270,459 | 1,354,992 | 87,164 | 51,046 | 55.8 | 4,163,900 | 1,902,437 | 407 | 78 | 19 | 3.8 |
| Bessemer & Lake Erie 1959 | 203 | 48,011 | 48,184 | 372 | 1,971 | 64.3 | 216,184 | 138,395 | 11 | .. | .. | .. |
| 1958 | 203 | 35,554 | 35,884 | 4 | 1,025 | 59.8 | 98,080 | 54,362 | 9 | 3 | 1 | 7.7 |
| Central RR Co. of New Jersey 1959 | 596 | 106,515 | 107,859 | 5,657 | 4,039 | 63.5 | 322,859 | 174,560 | 63 | 2 | 3 | 4.4 |
| 1958 | 597 | 117,763 | 119,227 | 6,202 | 4,211 | 61.5 | 336,561 | 178,787 | 60 | .. | 7 | 10.4 |
| Chicago & Eastern Ill. 1959 | 863 | 107,580 | 107,580 | 2,472 | 4,748 | 60.4 | 376,499 | 185,389 | 28 | .. | 4 | 12.5 |
| 1958 | 863 | 119,283 | 119,283 | 2,687 | 4,819 | 59.1 | 383,253 | 184,891 | 25 | .. | 3 | 10.7 |
| Elgin, Joliet & Eastern 1959 | 205 | 67,557 | 68,235 | .... | 2,197 | 59.7 | 190,425 | 102,970 | 40 | 2 | 1 | 2.3 |
| 1958 | 236 | 60,069 | 61,024 | .... | 2,054 | 58.4 | 175,357 | 93,151 | 42 | 2 | .. | .. |
| Pennsylvania System 1959 | 9,839 | 2,624,383 | 2,750,634 | 178,278 | 108,880 | 60.1 | 8,562,521 | 3,984,145 | 679 | .. | 86 | 11.2 |
| 1958 | 9,862 | 2,503,572 | 2,627,244 | 163,627 | 96,827 | 57.5 | 7,484,437 | 3,251,391 | 671 | 10 | 110 | 13.9 |
| Reading 1959 | 1,301 | 305,633 | 306,788 | 8,655 | 11,901 | 59.9 | 1,056,939 | 573,605 | 155 | 4 | 11 | 6.5 |
| 1958 | 1,302 | 295,614 | 297,157 | 9,941 | 10,468 | 55.0 | 920,454 | 464,233 | 146 | 4 | 31 | 17.1 |
| Western Maryland 1959 | 843 | 147,938 | 154,909 | 10,314 | 6,835 | 64.5 | 613,425 | 356,321 | 44 | .. | .. | .. |
| 1958 | 844 | 143,526 | 149,203 | 8,495 | 5,449 | 54.5 | 512,222 | 277,182 | 43 | 2 | .. | .. |
| **Pocahontas Region** | | | | | | | | | | | | |
| Chesapeake & Ohio 1959 | 5,060 | 1,166,613 | 1,168,326 | 20,250 | 52,778 | 53.7 | 4,814,723 | 2,634,805 | 593 | .. | 36 | 5.7 |
| 1958 | 5,061 | 1,221,719 | 1,226,231 | 21,876 | 52,210 | 52.4 | 4,820,575 | 2,597,061 | 598 | .. | 8 | 1.3 |
| Norfolk & Western* 1959 | 2,724 | 762,717 | 782,986 | 32,211 | 38,335 | 53.3 | 3,878,187 | 2,118,499 | 187 | 16 | 10 | 4.7 |
| 1958 | 2,724 | 732,487 | 770,214 | 46,337 | 36,086 | 54.3 | 3,470,845 | 1,868,372 | 237 | 27 | 23 | 8.0 |
| Rich., Fred. & Potomac 1959 | 110 | 40,223 | 40,223 | 810 | 2,453 | 59.9 | 175,405 | 69,087 | 15 | .. | .. | .. |
| 1958 | 110 | 40,152 | 40,152 | 855 | 2,293 | 56.0 | 164,838 | 58,792 | 15 | .. | .. | .. |
| **Southern Region** | | | | | | | | | | | | |
| Atlantic Coast Line 1959 | 5,251 | 679,601 | 679,601 | 7,014 | 25,100 | 54.6 | 2,028,366 | 898,142 | 118 | .. | 1 | .8 |
| 1958 | 5,297 | 689,659 | 689,659 | 6,784 | 22,656 | 53.5 | 1,822,585 | 770,115 | 127 | .. | .. | .. |
| Central of Georgia 1959 | 1,712 | 179,711 | 179,711 | 2,011 | 7,187 | 63.0 | 554,418 | 269,284 | 32 | .. | 2 | 5.9 |
| 1958 | 1,730 | 186,845 | 186,845 | 1,910 | 6,693 | 61.2 | 521,177 | 246,686 | 33 | .. | 2 | 5.7 |
| Florida East Coast 1959 | 572 | 114,457 | 114,457 | .... | 3,560 | 57.7 | 278,891 | 98,075 | 53 | .. | 1 | 1.9 |
| 1958 | 571 | 126,338 | 126,338 | 29 | 3,966 | 51.3 | 302,668 | 101,475 | 54 | .. | .. | .. |
| Gulf, Mobile & Ohio 1959 | 2,717 | 263,391 | 263,391 | .... | 14,179 | 60.7 | 1,068,498 | 492,926 | 87 | .. | 4 | 4.4 |
| 1958 | 2,717 | 262,987 | 262,987 | .... | 13,393 | 62.2 | 993,152 | 462,054 | 83 | .. | 8 | 8.8 |
| Illinois Central 1959 | 6,500 | 1,000,209 | 1,000,209 | 25,866 | 42,640 | 57.2 | 3,328,302 | 1,508,760 | 207 | 10 | 115 | 34.6 |
| 1958 | 6,497 | 1,047,033 | 1,047,033 | 28,147 | 42,828 | 56.9 | 3,340,183 | 1,501,559 | 218 | 34 | 149 | 37.2 |
| Louisville & Nashville 1959 | 5,678 | 975,658 | 976,315 | 16,096 | 35,960 | 57.4 | 2,964,878 | 1,431,376 | 168 | .. | 3 | 1.8 |
| 1958 | 5,680 | 959,558 | 961,902 | 16,790 | 34,779 | 56.3 | 2,830,735 | 1,351,160 | 164 | .. | 3 | 1.8 |
| Seaboard Air Line 1959 | 4,134 | 605,357 | 605,357 | 2,357 | 24,636 | 56.1 | 1,989,655 | 897,678 | 122 | .. | 6 | 4.7 |
| 1958 | 4,135 | 588,724 | 588,724 | 1,156 | 22,695 | 55.0 | 1,827,035 | 800,841 | 128 | .. | 6 | 4.5 |
| Southern 1959 | 6,242 | 848,751 | 848,911 | 8,495 | 39,517 | 60.2 | 2,864,626 | 1,301,822 | 195 | 6 | 4 | 2.0 |
| 1958 | 6,243 | 846,816 | 847,054 | 8,661 | 37,386 | 59.7 | 2,689,740 | 1,198,926 | 194 | .. | 2 | 1.0 |
| **Northwestern Region** | | | | | | | | | | | | |
| Chicago & North Western 1959 | 9,244 | 780,851 | 780,851 | 9,943 | 27,734 | 57.4 | 2,121,786 | 854,449 | 167 | .. | 19 | 10.2 |
| 1958 | 9,254 | 787,861 | 787,954 | 8,562 | 28,845 | 58.7 | 2,118,651 | 894,195 | 169 | .. | 18 | 9.6 |
| Chicago Great Western 1959 | 1,437 | 137,584 | 137,584 | 180 | 6,808 | 60.4 | 513,232 | 231,844 | 24 | .. | 3 | 11.1 |
| 1958 | 1,437 | 134,141 | 134,141 | 167 | 6,427 | 61.6 | 468,519 | 207,845 | 25 | .. | 1 | 3.8 |
| Chic., Milw., St. P. & Pac. 1959 | 10,591 | 798,303 | 804,097 | 7,845 | 33,490 | 60.0 | 2,425,185 | 1,053,113 | 341 | 15 | 13 | 3.5 |
| 1958 | 10,583 | 843,355 | 855,380 | 14,404 | 34,755 | 59.3 | 2,535,021 | 1,091,832 | 285 | 10 | 12 | 3.9 |
| Duluth, Missabe & Iron Range 1959 | 575 | 66,477 | 66,548 | 423 | 2,674 | 49.8 | 274,049 | 148,534 | 65 | 5 | 8 | 10.3 |
| 1958 | 557 | 25,866 | 25,879 | 155 | 405 | 48.2 | 37,750 | 17,714 | 24 | 33 | 11 | 16.2 |
| Great Northern 1959 | 8,276 | 900,510 | 903,129 | 18,405 | 35,939 | 62.6 | 2,682,106 | 1,219,986 | 273 | 10 | 9 | 3.1 |
| 1958 | 8,281 | 906,885 | 909,787 | 22,615 | 35,036 | 65.9 | 2,522,368 | 1,170,306 | 262 | 6 | 10 | 3.6 |
| Minneap., St. P. & S. Ste. Marie 1959 | 4,169 | 347,066 | 347,617 | 385 | 11,166 | 60.7 | 802,050 | 347,577 | 89 | 4 | 6 | 6.1 |
| 1958 | 4,169 | 361,926 | 362,427 | 950 | 11,247 | 62.2 | 790,040 | 343,793 | 89 | 8 | 4 | 4.0 |
| Northern Pacific 1959 | 6,538 | 767,589 | 774,292 | 10,229 | 29,339 | 58.7 | 2,143,486 | 894,202 | 243 | 1 | 3 | 1.2 |
| 1958 | 6,533 | 738,799 | 744,678 | 9,460 | 27,723 | 62.5 | 1,963,063 | 853,777 | 232 | 5 | 7 | 2.9 |
| Spokane, Portland & Seattle 1959 | 935 | 138,164 | 138,164 | 1,047 | 5,814 | 71.8 | 412,154 | 206,221 | 55 | .. | 2 | 3.5 |
| 1958 | 935 | 138,912 | 138,912 | 1,290 | 5,476 | 68.4 | 382,962 | 178,864 | 53 | .. | 2 | 3.6 |
| **Central Western Region** | | | | | | | | | | | | |
| Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) 1959 | 12,992 | 2,581,466 | 2,728,241 | 50,771 | 107,481 | 61.7 | 7,883,628 | 2,998,796 | 633 | .. | 40 | 5.9 |
| 1958 | 13,081 | 2,406,499 | 2,574,024 | 53,710 | 106,421 | 61.3 | 7,799,159 | 2,973,178 | 566 | 5 | 114 | 16.6 |
| Chic., Burl. & Quincy 1959 | 8,637 | 1,043,204 | 1,040,370 | 21,707 | 41,728 | 59.5 | 3,054,301 | 1,287,146 | 140 | 5 | 75 | 34.1 |
| 1958 | 8,653 | 1,098,446 | 1,095,400 | 37,538 | 43,202 | 60.4 | 3,142,996 | 1,355,944 | 137 | 10 | 72 | 32.9 |
| Chic., Rock I. & Pac. 1959 | 7,508 | 883,523 | 890,868 | 1,135 | 36,141 | 58.7 | 2,735,010 | 1,088,319 | 187 | .. | 7 | 3.6 |
| 1958 | 7,548 | 985,722 | 989,576 | 2,449 | 36,442 | 59.8 | 2,755,477 | 1,152,038 | 177 | .. | 8 | 4.3 |
| Denver & R. G. Wn. 1959 | 2,128 | 289,784 | 306,633 | 29,989 | 12,848 | 69.5 | 942,024 | 458,633 | 84 | 4 | 10 | 10.2 |
| 1958 | 2,155 | 279,936 | 296,546 | 29,471 | 12,946 | 72.2 | 918,596 | 452,114 | 80 | 8 | 8 | 8.3 |
| Southern Pacific 1959 | 8,011 | 2,100,801 | 2,179,914 | 137,368 | 92,994 | 65.0 | 6,449,789 | 2,752,357 | 696 | 18 | 54 | 7.0 |
| 1958 | 8,017 | 2,019,876 | 2,081,837 | 112,895 | 88,471 | 64.4 | 6,079,543 | 2,520,139 | 620 | 5 | 47 | 7.0 |
| Union Pacific 1959 | 9,742 | 1,971,220 | 1,990,801 | 50,226 | 92,988 | 64.1 | 6,427,024 | 2,737,200 | 363 | 30 | 75 | 16.0 |
| 1958 | 9,745 | 2,114,847 | 2,148,567 | 66,663 | 92,678 | 60.9 | 6,574,335 | 2,705,694 | 350 | 26 | 107 | 22.2 |
| Western Pacific 1959 | 1,188 | 246,050 | 250,873 | 20,253 | 9,134 | 67.7 | 623,072 | 279,632 | 51 | 1 | 1 | 1.9 |
| 1958 | 1,189 | 220,405 | 226,901 | 26,923 | 8,912 | 70.5 | 590,198 | 268,608 | 45 | .. | 2 | 4.3 |
| **Southwestern Region** | | | | | | | | | | | | |
| Kansas City Southern 1959 | 886 | 119,602 | 119,602 | 115 | 7,396 | 62.8 | 568,538 | 259,006 | 23 | .. | 2 | 8.0 |
| 1958 | 886 | 128,127 | 128,158 | 174 | 8,245 | 63.8 | 626,471 | 286,919 | 24 | .. | 1 | 4.0 |
| Louisiana & Arkansas 1959 | 746 | 74,786 | 74,786 | .... | 3,445 | 61.4 | 276,715 | 123,527 | 17 | .. | .. | .. |
| 1958 | 746 | 67,785 | 67,785 | 28 | 3,458 | 62.1 | 276,671 | 129,612 | 14 | .. | .. | .. |
| Mo.-Kans.-Texas Lines 1959 | 2,916 | 222,603 | 222,603 | 2,158 | 9,251 | 56.7 | 731,305 | 311,108 | 58 | .. | 1 | 1.7 |
| 1958 | 2,915 | 213,757 | 213,757 | 1,965 | 9,951 | 60.0 | 743,729 | 322,592 | 70 | .. | 3 | 4.1 |
| Missouri Pacific 1959 | 9,413 | 1,154,358 | 1,154,358 | 8,333 | 50,224 | 59.8 | 3,758,896 | 1,644,219 | 209 | 4 | 17 | 7.4 |
| 1958 | 9,513 | 1,111,808 | 1,111,808 | 8,045 | 48,538 | 60.3 | 3,637,516 | 1,592,561 | 205 | 12 | 20 | 8.4 |
| St. Louis-San Francisco 1959 | 4,527 | 574,344 | 574,434 | 5,727 | 23,413 | 64.9 | 1,626,313 | 745,931 | 98 | .. | 9 | 8.4 |
| 1958 | 4,541 | 597,735 | 597,735 | 7,177 | 22,659 | 62.9 | 1,609,986 | 730,052 | 101 | .. | 10 | 9.0 |
| St. Louis Southw. Lines 1959 | 1,554 | 336,296 | 336,296 | 4,186 | 14,514 | 65.4 | 969,593 | 433,422 | 50 | .. | 1 | 2.0 |
| 1958 | 1,554 | 325,793 | 325,795 | 1,620 | 14,504 | 66.3 | 956,237 | 427,452 | 51 | .. | 1 | 1.9 |
| Texas & New Orleans 1959 | 4,080 | 595,955 | 595,955 | 86 | 26,202 | 61.0 | 1,929,505 | 846,386 | 140 | .. | 1 | .7 |
| 1958 | 4,204 | 632,206 | 632,206 | 582 | 27,831 | 62.9 | 2,029,503 | 910,669 | 137 | .. | 5 | 3.5 |
| Texas & Pacific 1959 | 1,819 | 294,726 | 294,726 | 2,878 | 13,386 | 60.3 | 1,019,122 | 381,087 | 38 | .. | 2 | 5.0 |
| 1958 | 1,822 | 296,236 | 296,236 | 2,773 | 13,538 | 58.3 | 1,048,877 | 386,776 | 38 | .. | 2 | 5.0 |

# For the Month of December 1959 Compared with December 1958

| Region | Road | Year | Freight cars on line: Home | Foreign | Total | Per Cent B.O. | G.t.m.per train-hr. excl.locos and tenders | G.t.m.per train-mi. excl.locos and tenders | Net ton-mi. per train-mile | Net ton-mi. per l'd car-mile | Net ton-mi. per car-day | Car-miles per car-day | Net daily ton-mi. per road-me. | Train-miles per train-hour | Miles per loco. per day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New Eng. Region | Boston & Maine | 1959 | 2,344 | 7,944 | 10,288 | 3.0 | 39,150 | 2,477 | 980 | 28.9 | 677 | 39.5 | 4,460 | 15.8 | 71.6 |
| | | 1958 | 2,862 | 7,255 | 10,717 | 3.0 | 40,092 | 2,496 | 985 | 28.4 | 708 | 41.9 | 4,339 | 16.1 | 80.9 |
| | N. Y., N. H. & Htfd | 1959 | 4,531 | 13,154 | 17,685 | 8.4 | 37,068 | 2,366 | 941 | 27.0 | 436 | 26.2 | 4,348 | 15.7 | 139.4 |
| | | 1958 | 3,887 | 10,954 | 14,841 | 4.9 | 40,256 | 2,513 | 981 | 26.5 | 495 | 30.7 | 4,342 | 16.0 | 112.3 |
| Great Lakes Region | Delaware & Hudson | 1959 | 1,532 | 4,873 | 6,405 | 9.7 | 64,583 | 3,575 | 1,844 | 37.8 | 1,388 | 56.6 | 12,800 | 18.2 | 161.7 |
| | | 1958 | 5,683 | 4,799 | 10,482 | 10.2 | 62,331 | 3,421 | 1,675 | 36.7 | 887 | 40.4 | 11,602 | 18.3 | 159.5 |
| | Del., Lack. & Western | 1959 | 5,951 | 8,283 | 14,234 | 11.5 | 53,827 | 3,005 | 1,273 | 30.2 | 649 | 34.0 | 9,559 | 18.1 | 135.3 |
| | | 1958 | 6,859 | 9,161 | 16,020 | 8.9 | 51,144 | 2,922 | 1,217 | 29.7 | 577 | 31.5 | 9,811 | 17.7 | 142.7 |
| | Erie | 1959 | 10,425 | 14,691 | 25,116 | 9.3 | 71,911 | 3,432 | 1,347 | 25.8 | 918 | 54.3 | 10,154 | 21.1 | 110.9 |
| | | 1958 | 12,961 | 11,664 | 24,625 | 8.6 | 68,882 | 3,371 | 1,321 | 25.4 | 874 | 52.9 | 9,712 | 20.7 | 110.1 |
| | Grand Trunk Western | 1959 | 5,103 | 7,108 | 12,211 | 5.1 | 55,538 | 2,424 | 917 | 29.3 | 467 | 28.7 | 6,079 | 22.9 | 99.2 |
| | | 1958 | 5,464 | 7,890 | 13,354 | 6.3 | 53,743 | 2,498 | 936 | 28.6 | 510 | 31.7 | 6,829 | 21.7 | 97.1 |
| | Lehigh Valley | 1959 | 6,091 | 9,324 | 15,415 | 10.9 | 61,973 | 2,915 | 1,331 | 32.0 | 549 | 26.6 | 7,295 | 21.4 | 208.9 |
| | | 1958 | 6,867 | 7,904 | 14,771 | 9.6 | 62,194 | 2,962 | 1,324 | 31.3 | 529 | 26.8 | 7,157 | 21.2 | 203.7 |
| | New York Central | 1959 | 57,248 | 72,134 | 129,382 | 8.9 | 59,614 | 3,402 | 1,450 | 34.8 | 682 | 35.2 | 8,789 | 17.7 | 156.5 |
| | | 1958 | 64,861 | 69,440 | 134,301 | 9.3 | 52,852 | 3,008 | 1,289 | 33.5 | 634 | 35.0 | 8,270 | 17.7 | 167.9 |
| | New York, Chic. & St. L. | 1959 | 9,163 | 15,833 | 24,996 | 14.5 | 62,586 | 3,378 | 1,488 | 33.5 | 1,149 | 56.5 | 13,528 | 18.7 | 158.3 |
| | | 1958 | 12,492 | 10,601 | 23,093 | 14.9 | 57,202 | 3,142 | 1,351 | 32.2 | 1,097 | 56.8 | 11,781 | 18.4 | 157.3 |
| | Pitts. & Lake Erie | 1959 | 4,912 | 6,389 | 11,301 | 3.5 | 57,393 | 3,778 | 2,242 | 56.4 | 382 | 10.8 | 20,108 | 15.4 | 134.0 |
| | | 1958 | 7,664 | 4,355 | 12,019 | 8.5 | 56,741 | 3,522 | 2,112 | 56.8 | 305 | 9.2 | 15,275 | 16.2 | 115.0 |
| | Wabash | 1959 | 10,019 | 6,724 | 16,743 | 12.3 | 83,755 | 3,480 | 1,390 | 28.2 | 980 | 55.9 | 6,928 | 24.2 | 110.0 |
| | | 1958 | 11,062 | 8,096 | 19,158 | 6.9 | 69,219 | 2,752 | 1,040 | 26.5 | 788 | 49.6 | 6,490 | 25.3 | 139.9 |
| Central Eastern Region | Baltimore & Ohio | 1959 | 57,733 | 43,333 | 101,066 | 14.9 | 54,422 | 3,514 | 1,671 | 39.0 | 724 | 32.8 | 12,568 | 15.7 | 116.0 |
| | | 1958 | 63,540 | 32,986 | 96,526 | 15.8 | 52,435 | 3,319 | 1,516 | 37.3 | 626 | 30.1 | 10,577 | 16.0 | 96.8 |
| | Bessemer & Lake Erie | 1959 | 4,105 | 1,282 | 5,387 | 8.3 | 70,121 | 4,782 | 3,061 | 70.2 | 890 | 19.7 | 21,992 | 15.6 | 161.0 |
| | | 1958 | 4,544 | 664 | 5,208 | 11.7 | 45,875 | 2,896 | 1,605 | 53.0 | 319 | 10.1 | 8,638 | 16.6 | 100.8 |
| | Central RR Co. of New Jersey | 1959 | 4,382 | 10,210 | 14,592 | 19.5 | 44,209 | 3,166 | 1,712 | 43.2 | 381 | 13.9 | 9,448 | 14.6 | 78.4 |
| | | 1958 | 4,579 | 9,071 | 13,650 | 14.3 | 44,012 | 3,032 | 1,611 | 42.5 | 426 | 16.3 | 9,661 | 15.4 | 83.8 |
| | Chicago & Eastern Ill. | 1959 | 3,795 | 2,313 | 6,108 | 15.4 | 67,124 | 3,524 | 1,735 | 39.0 | 1,034 | 43.8 | 6,930 | 19.2 | 118.1 |
| | | 1958 | 3,308 | 2,269 | 5,577 | 9.6 | 60,613 | 3,234 | 1,560 | 38.4 | 1,142 | 50.4 | 6,911 | 18.9 | 141.1 |
| | Elgin, Joliet & Eastern | 1959 | 7,599 | 8,343 | 15,942 | 4.1 | 21,549 | 2,915 | 1,577 | 46.9 | 226 | 8.1 | 16,203 | 7.6 | 72.0 |
| | | 1958 | 8,118 | 7,064 | 15,182 | 5.3 | 20,502 | 3,055 | 1,623 | 45.4 | 206 | 7.8 | 12,733 | 7.0 | 62.8 |
| | Pennsylvania System | 1959 | 100,696 | 91,999 | 192,695 | 11.1 | 55,270 | 3,362 | 1,564 | 36.6 | 662 | 30.1 | 13,062 | 16.9 | 135.6 |
| | | 1958 | 132,905 | 68,797 | 201,702 | 21.5 | 53,182 | 3,061 | 1,330 | 33.6 | 521 | 27.0 | 10,635 | 17.8 | 121.6 |
| | Reading | 1959 | 13,816 | 18,616 | 32,432 | 18.5 | 52,608 | 3,458 | 1,877 | 48.2 | 565 | 19.6 | 14,222 | 15.2 | 70.6 |
| | | 1958 | 21,886 | 13,689 | 35,575 | 21.1 | 49,314 | 3,114 | 1,570 | 44.3 | 412 | 16.9 | 11,502 | 15.8 | 67.4 |
| | Western Maryland | 1959 | 6,045 | 3,935 | 9,980 | 5.2 | 57,233 | 4,211 | 2,446 | 52.1 | 1,213 | 36.1 | 13,635 | 13.8 | 136.9 |
| | | 1958 | 8,794 | 3,032 | 11,826 | 2.2 | 53,262 | 3,640 | 1,970 | 50.9 | 792 | 28.6 | 10,594 | 14.9 | 124.6 |
| Pocahontas Region | Chesapeake & Ohio | 1959 | 64,703 | 25,861 | 90,564 | 3.7 | 75,160 | 4,149 | 2,271 | 49.9 | 962 | 35.9 | 16,797 | 18.2 | 66.0 |
| | | 1958 | 66,436 | 24,899 | 91,335 | 5.6 | 72,131 | 3,969 | 2,138 | 49.7 | 915 | 35.1 | 16,553 | 18.3 | 72.5 |
| | Norfolk & Western* | 1959 | 55,901 | 7,802 | 63,703 | 2.8 | 88,900 | 5,200 | 2,840 | 55.3 | 1,130 | 38.4 | 25,088 | 17.5 | 124.9 |
| | | 1958 | 60,044 | 10,552 | 70,596 | 5.1 | 82,199 | 4,864 | 2,618 | 51.8 | 866 | 30.8 | 22,126 | 17.3 | 101.6 |
| | Rich., Fred. & Potomac | 1959 | 122 | 746 | 868 | 4.0 | 102,396 | 4,368 | 1,720 | 28.2 | 2,272 | 134.8 | 20,260 | 23.5 | 92.6 |
| | | 1958 | 161 | 826 | 987 | 2.4 | 90,920 | 4,112 | 1,467 | 25.6 | 1,969 | 137.1 | 17,241 | 22.1 | 92.4 |
| Southern Region | Atlantic Coast Line | 1959 | 20,473 | 16,665 | 37,138 | 5.0 | 50,817 | 2,997 | 1,327 | 35.8 | 803 | 41.1 | 5,517 | 17.0 | 211.2 |
| | | 1958 | 22,314 | 14,016 | 36,330 | 3.6 | 47,637 | 2,652 | 1,121 | 34.0 | 692 | 38.1 | 4,690 | 18.0 | 201.7 |
| | Central of Georgia | 1959 | 4,109 | 4,834 | 8,943 | 3.3 | 53,500 | 3,087 | 1,500 | 37.5 | 983 | 41.6 | 5,074 | 17.3 | 186.3 |
| | | 1958 | 4,688 | 3,813 | 8,501 | 3.7 | 50,792 | 2,794 | 1,322 | 36.9 | 941 | 41.7 | 4,600 | 18.2 | 190.1 |
| | Florida East Coast | 1959 | 712 | 4,326 | 5,038 | .5 | 42,821 | 2,437 | 857 | 27.5 | 664 | 41.8 | 5,531 | 17.6 | 75.6 |
| | | 1958 | 826 | 4,954 | 5,780 | .5 | 40,200 | 2,407 | 807 | 25.6 | 616 | 46.9 | 5,733 | 16.8 | 85.1 |
| | Gulf, Mobile & Ohio | 1959 | 7,537 | 8,703 | 16,240 | 6.4 | 78,630 | 4,059 | 1,873 | 34.8 | 951 | 45.1 | 5,852 | 19.4 | 101.2 |
| | | 1958 | 7,925 | 8,335 | 16,260 | 5.8 | 73,209 | 3,778 | 1,758 | 34.5 | 898 | 41.8 | 5,486 | 19.4 | 100.6 |
| | Illinois Central | 1959 | 29,535 | 17,832 | 47,367 | 3.4 | 61,120 | 3,351 | 1,519 | 35.4 | 981 | 48.5 | 7,488 | 18.4 | 101.7 |
| | | 1958 | 29,906 | 20,392 | 50,298 | 3.8 | 57,641 | 3,218 | 1,446 | 35.1 | 974 | 48.9 | 7,455 | 18.1 | 95.9 |
| | Louisville & Nashville | 1959 | 38,089 | 17,429 | 55,518 | 10.7 | 54,821 | 3,047 | 1,471 | 39.8 | 854 | 37.4 | 8,132 | 18.0 | 203.6 |
| | | 1958 | 39,196 | 16,837 | 56,033 | 6.2 | 51,697 | 2,956 | 1,411 | 38.8 | 798 | 36.5 | 7,674 | 17.5 | 213.9 |
| | Seaboard Air Line | 1959 | 17,234 | 13,607 | 30,841 | 2.7 | 60,051 | 3,344 | 1,509 | 36.4 | 947 | 46.3 | 7,005 | 18.3 | 181.7 |
| | | 1958 | 19,911 | 10,362 | 30,273 | 2.5 | 58,112 | 3,161 | 1,386 | 35.3 | 863 | 44.5 | 6,248 | 18.7 | 162.7 |
| | Southern | 1959 | 19,484 | 30,917 | 50,401 | 3.7 | 57,051 | 3,382 | 1,537 | 32.9 | 855 | 43.1 | 6,728 | 16.9 | 150.3 |
| | | 1958 | 19,693 | 29,735 | 49,428 | 4.7 | 57,258 | 3,182 | 1,418 | 32.1 | 800 | 41.8 | 6,195 | 18.0 | 154.7 |
| Northwestern Region | Chicago & North Western | 1959 | 23,501 | 22,977 | 46,478 | 5.4 | 50,670 | 2,726 | 1,098 | 30.8 | 583 | 33.0 | 2,982 | 18.6 | 155.3 |
| | | 1958 | 24,171 | 26,832 | 51,003 | 4.3 | 50,327 | 2,703 | 1,141 | 31.0 | 595 | 32.7 | 3,117 | 18.7 | 149.7 |
| | Chicago Great Western | 1959 | 2,857 | 3,531 | 6,388 | 3.6 | 71,421 | 3,739 | 1,689 | 34.1 | 1,169 | 56.8 | 5,204 | 19.1 | 177.0 |
| | | 1958 | 2,453 | 3,708 | 6,161 | 3.8 | 68,118 | 3,496 | 1,551 | 32.3 | 1,173 | 58.9 | 4,666 | 19.5 | 178.1 |
| | Chic., Milw., St. P. & Pac. | 1959 | 29,849 | 19,223 | 49,072 | 4.4 | 63,195 | 3,046 | 1,323 | 31.4 | 664 | 35.1 | 3,208 | 20.8 | 80.2 |
| | | 1958 | 33,278 | 24,991 | 58,269 | 4.2 | 60,464 | 3,014 | 1,298 | 31.4 | 614 | 33.0 | 3,328 | 20.1 | 99.4 |
| | Duluth, Missabe & Iron Range | 1959 | 12,306 | 1,131 | 13,437 | 1.6 | 72,328 | 4,492 | 2,435 | 55.5 | 353 | 12.8 | 8,333 | 17.5 | 31.7 |
| | | 1958 | 14,041 | 577 | 14,618 | 4.2 | 23,579 | 1,521 | 714 | 43.7 | 382 | 1.8 | 1,026 | 16.2 | 12.4 |
| | Great Northern | 1959 | 24,569 | 15,269 | 39,838 | 2.8 | 63,437 | 3,022 | 1,375 | 33.9 | 905 | 42.6 | 4,755 | 21.3 | 110.9 |
| | | 1958 | 24,442 | 19,265 | 43,707 | 2.6 | 56,637 | 2,817 | 1,307 | 33.4 | 850 | 38.6 | 4,559 | 20.4 | 117.0 |
| | Minneap., St. P. & S. Ste. Marie | 1959 | 7,960 | 6,164 | 14,124 | 6.5 | 47,163 | 2,318 | 1,004 | 31.1 | 798 | 42.2 | 2,689 | 20.4 | 124.3 |
| | | 1958 | 5,774 | 7,427 | 13,201 | 6.2 | 42,707 | 2,190 | 953 | 30.6 | 856 | 45.0 | 2,660 | 19.6 | 129.6 |
| | Northern Pacific | 1959 | 20,519 | 14,360 | 34,879 | 2.3 | 60,784 | 2,798 | 1,167 | 30.5 | 818 | 45.7 | 4,412 | 21.8 | 109.5 |
| | | 1958 | 20,195 | 14,123 | 34,318 | 2.9 | 57,532 | 2,661 | 1,157 | 30.8 | 777 | 40.4 | 4,216 | 21.7 | 106.8 |
| | Spokane, Portland & Seattle | 1959 | 1,394 | 3,929 | 5,323 | 2.2 | 45,118 | 2,993 | 1,498 | 35.5 | 1,184 | 46.5 | 7,115 | 15.1 | 92.9 |
| | | 1958 | 1,453 | 3,674 | 5,127 | 2.3 | 43,747 | 2,768 | 1,293 | 32.7 | 1,029 | 46.1 | 6,171 | 15.9 | 93.5 |
| Central Western Region | Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) | 1959 | 52,374 | 32,388 | 84,762 | 3.6 | 78,065 | 3,068 | 1,167 | 27.9 | 1,120 | 65.1 | 7,446 | 25.6 | 142.1 |
| | | 1958 | 54,021 | 32,200 | 86,221 | 7.1 | 79,616 | 3,247 | 1,238 | 27.0 | 1,078 | 62.9 | 7,332 | 24.6 | 131.3 |
| | Chic., Burl. & Quincy | 1959 | 27,300 | 16,825 | 44,125 | 4.0 | 65,732 | 2,941 | 1,239 | 30.8 | 951 | 51.9 | 4,807 | 22.5 | 162.8 |
| | | 1958 | 26,456 | 22,709 | 49,165 | 3.1 | 62,995 | 2,869 | 1,238 | 31.4 | 920 | 48.5 | 5,055 | 22.0 | 173.8 |
| | Chic., Rock I. & Pac. | 1959 | 17,067 | 19,041 | 36,108 | 5.3 | 67,791 | 3,103 | 1,235 | 30.1 | 959 | 54.2 | 4,676 | 21.9 | 158.8 |
| | | 1958 | 17,643 | 22,526 | 40,169 | 4.7 | 61,747 | 2,803 | 1,172 | 31.6 | 938 | 49.6 | 4,923 | 22.1 | 184.4 |
| | Denver & R. G. Wn. | 1959 | 8,371 | 6,017 | 14,388 | 5.0 | 65,710 | 3,261 | 1,588 | 35.7 | 1,040 | 41.9 | 6,959 | 20.2 | 119.5 |
| | | 1958 | 8,472 | 4,948 | 13,420 | 5.0 | 67,707 | 3,290 | 1,619 | 34.9 | 1,078 | 42.8 | 6,768 | 20.6 | 114.8 |
| | Southern Pacific | 1959 | 34,340 | 41,087 | 75,427 | 2.0 | 69,257 | 3,111 | 1,328 | 29.6 | 1,237 | 64.3 | 11,083 | 22.6 | 105.6 |
| | | 1958 | 37,065 | 33,835 | 70,900 | 1.7 | 65,173 | 3,042 | 1,261 | 28.5 | 1,120 | 61.1 | 10,140 | 21.7 | 113.6 |
| | Union Pacific | 1959 | 35,370 | 29,127 | 64,497 | 1.8 | 89,414 | 3,294 | 1,403 | 29.4 | 1,392 | 73.7 | 9,064 | 27.4 | 145.6 |
| | | 1958 | 34,137 | 33,633 | 67,770 | 1.6 | 84,642 | 3,133 | 1,289 | 29.2 | 1,289 | 72.5 | 8,956 | 27.2 | 150.8 |
| | Western Pacific | 1959 | 2,480 | 2,223 | 4,703 | 4.1 | 73,903 | 2,551 | 1,145 | 30.6 | 1,853 | 89.3 | 7,593 | 29.2 | 179.4 |
| | | 1958 | 2,967 | 2,648 | 5,615 | 2.5 | 74,304 | 2,708 | 1,233 | 30.1 | 1,507 | 70.9 | 7,287 | 27.7 | 181.2 |
| Southwestern Region | Kansas City Southern | 1959 | 2,161 | 5,551 | 7,712 | 6.1 | 100,165 | 4,767 | 2,171 | 35.0 | 1,070 | 48.6 | 9,430 | 21.1 | 183.8 |
| | | 1958 | 2,804 | 4,855 | 7,659 | 6.1 | 104,030 | 4,914 | 2,251 | 34.8 | 1,215 | 54.7 | 10,446 | 21.3 | 200.7 |
| | Louisiana & Arkansas | 1959 | 1,834 | 3,287 | 5,121 | 6.6 | 74,606 | 3,722 | 1,729 | 37.3 | 800 | 34.9 | 5,558 | 20.2 | 160.3 |
| | | 1958 | 2,166 | 2,878 | 5,044 | 7.0 | 83,259 | 4,114 | 1,927 | 37.5 | 813 | 35.0 | 5,605 | 20.4 | 156.1 |
| | Mo.-Kans.-Texas Lines | 1959 | 5,665 | 5,273 | 10,938 | 8.2 | 57,547 | 3,290 | 1,400 | 33.6 | 881 | 46.2 | 3,442 | 17.5 | 136.3 |
| | | 1958 | 5,628 | 6,058 | 11,686 | 10.0 | 61,122 | 3,483 | 1,511 | 32.4 | 850 | 43.7 | 3,570 | 17.6 | 103.8 |
| | Missouri Pacific | 1959 | 27,685 | 18,089 | 45,774 | 6.5 | 69,523 | 3,270 | 1,430 | 32.7 | 1,145 | 58.5 | 5,635 | 21.4 | 176.7 |
| | | 1958 | 25,983 | 18,814 | 44,797 | 8.3 | 69,279 | 3,290 | 1,440 | 32.8 | 1,125 | 56.9 | 5,400 | 21.2 | 159.9 |
| | St. Louis-San Francisco | 1959 | 12,766 | 8,573 | 21,339 | 1.8 | 59,376 | 2,846 | 1,305 | 31.9 | 1,170 | 56.6 | 5,315 | 21.0 | 195.5 |
| | | 1958 | 13,727 | 8,364 | 22,091 | 1.8 | 57,629 | 2,705 | 1,227 | 32.2 | 1,075 | 53.0 | 5,186 | 21.4 | 195.6 |
| | St. Louis Southw. Lines | 1959 | 2,713 | 2,979 | 5,692 | 3.4 | 75,343 | 2,888 | 1,291 | 29.9 | 2,382 | 121.9 | 8,997 | 26.1 | 221.8 |
| | | 1958 | 2,898 | 3,906 | 6,804 | 3.0 | 71,946 | 2,945 | 1,316 | 29.5 | 1,998 | 102.2 | 8,873 | 24.5 | 206.9 |
| | Texas & New Orleans | 1959 | 7,324 | 12,366 | 19,690 | 2.4 | 79,198 | 3,253 | 1,427 | 32.3 | 1,289 | 65.4 | 6,692 | 24.5 | 144.1 |
| | | 1958 | 7,600 | 13,113 | 20,713 | 1.8 | 75,474 | 3,227 | 1,448 | 32.7 | 1,386 | 67.4 | 6,988 | 23.5 | 153.7 |
| | Texas & Pacific | 1959 | 4,027 | 5,099 | 9,126 | 4.1 | 80,013 | 3,480 | 1,301 | 28.5 | 1,317 | 76.7 | 6,758 | 23.1 | 255.3 |
| | | 1958 | 4,060 | 5,617 | 9,677 | 4.7 | 76,149 | 3,569 | 1,316 | 28.6 | 1,317 | 79.1 | 6,848 | 21.5 | 253.7 |

* Includes operations of Virginian Ry. Co., merged into Norfolk & Western Ry. Co., December 1, 1959.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision

has "materially reduced" its damage by a recent change in what had long been considered a satisfactory loading pattern.

6) *Provide better supervision.* "Probably," says Southworth Lancaster, Boston transportation consultant, "at least 90% of all industrial traffic managers know what ought to be done. The real problem is to make sure the shipping room follows proper preventive practices." The way to guarantee the latter, Mr. Mundy believes, is to "improve the level of supervision, and make certain each man realizes the importance of his responsibility." This basic idea is repeated many times in Poll replies.

7) *Keep the subject under constant study.* The relationship between better supervision and constant study is understandably close. Mr. Gabriel, for example, says "people on our platforms must be educated. If they cannot, then other men, carriers or methods of handling must be substituted." Mr. Bowman's company has an inter-departmental Claim Prevention Committee "to review loading procedures and damage records, and evaluate new techniques . . . At various times, our loading personnel are sent to district branches to inspect carloads upon arrival. This gives them a better understanding of how shipments arrive and has resulted in improvement in loading practices." Cessna sends its key shipping and inspection personnel to recognized clinics on packaging; encourages them to participate in national transportation associations, and welcomes from them suggestions as to possible improvements.

8) *Use photographs.* This still-relatively new technique in damage prevention—previously reported several times in Railway Age—appears to be making rapid progress. Hershey, Sharon, Johnson and Cessna all say they use it regularly, as do a good many other companies.

Vega Industries has its own variation of the same basic idea: "Every [outgoing] car contains a loading diagram. When and if damage occurs, we ask the customer to spot it on the diagram and return it to us."

9) *Stop using carriers with poor damage records.* This suggestion, implied in a good many answers, is set out positively by Mr. Koerber: "If damage is greater via a certain carrier than via another, route via the one with the best record." J. J. DeLaney, director of transportation, American La France Foamite, Elmira, N. Y., concurs: "Why not discontinue using railroads that are notoriously bad?"

In addition to the foregoing general ideas, the Poll produced a number of specific comments—most of them applicable, however, only on certain types of shipments.

J. R. Wildman, traffic manager, Adolph Coors Co., Golden, Colo., reports "excellent results" from use of nylon instead of metal straps for securing bulkheads. "When the car is humped," he says, "the nylon stretches, which reduces the shock to lading."

B. M. Bonham, traffic manager, Wire Rope division, American Chain & Cable Co., Wilkes-Barre, Pa., is trying out a "Retracto" chock for blocking wooden reels of wire rope, and finds it "very satisfactory." It has the added advantage of permitting faster loading and unloading.

"Syton-P," a new non-slip coating for

(*Continued on page 73*)

**SERVICE BETWEEN**

Chicago & Illinois Midland Ry.
Chicago & North Western Ry.
Gulf, Mobile & Ohio RR.
Illinois Central Railroad
New York, Chicago & St. Louis RR.
New York Central System
Pennsylvania Railroad
Atchison, Topeka & Santa Fe Ry.
Chicago, Burlington & Quincy RR.
Chicago, Rock Island and Pacific Ry.
Illinois Terminal Railroad
Federal Barge Lines, Inc.
Minneapolis & St. Louis Ry.
Peoria Terminal RR.
Toledo, Peoria & Western RR.

Contributing to fast and careful handling this month and every month, the P & P U Ry. co-operates fully with its 15 connecting lines to speed shipments safely through the Peoria Gateway to and from all principal industrial and marketing areas in the U. S.

Over 79 years' experience in interchange service . . . modern Diesel locomotives . . . modern railroading facilities.

**PEORIA AND PEKIN UNION RAILWAY CO.**
**L. R. Barnewolt, General Agent**
**Peoria, Illinois**

## THE DEVELOPMENT OF AMERICAN INDUSTRIES

**by John G. Glover and Rudolph L. Lagai**

This recently published book surveys the varied, underlying role of industry in the economic growth of the United States from agrarian colonial times to the present atomic era. It presents a cross section of 36 representative industries. Each section is presented in a similar way, thus permitting the student or business executive to relate the important aspects of any one industry to those of any other. Coverage of the history and development of the railroad industry in the United States is particularly thorough. 1959. 835 pp. 40 illus. 6 x 9. $7.50

## FUNDAMENTALS OF PROFESSIONAL MANAGEMENT

**by John G. Glover**

This authoritative new book presents an up-to-date treatment of the principles of management. It presents a systematic approach to the subject with broad coverage of the field from the underlying philosophy of management to the work-saving potential of automation. Thorough treatment of the basic principles of management makes the book invaluable for both the student and the younger executive. More advanced materials on such subjects as research resources, budgetary control, linear programming and automation provide a strong appeal for the seasoned executive who seeks an authoritative and compendious statement of the more recent developments in management techniques. 1958. 406 pp. illus. 6 x 9. Cloth. $6.50

**Simmons-Boardman Publ. Corp., Dept. RA 3-28**
**30 Church Street**
**New York 7, New York**

Please send a copy of the book checked below post paid. I enclose my remittance herewith.

☐ THE DEVELOPMENT OF AMERICAN INDUSTRIES $7.50
☐ FUNDAMENTALS OF PROFESSIONAL MANAGEMENT $6.50

Name .....

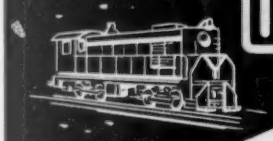
Street .....

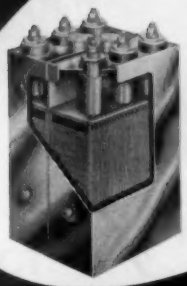
City ..... Zone ..... State .....



# RELIABILITY WITH A PERMANENCE

NICAD
TRADEMARK





## DIESEL LOCOMOTIVE BATTERIES

NOW . . . improved cranking ability and higher ampere hour capacity at no increase in cost with NICAD twin cell batteries, easily your best choice for economy, long service life, permanent reliability. Call in the NICAD representative near you . . . what he has to say will quickly convince you that—for low-cost operation—NICAD is superior to other types of batteries.

Using rugged, reliable NICAD assures you of low maintenance cost . . . infrequent watering . . . no corrosive fumes . . . "like new" performance even after long periods of idleness.

As in railway signal service, NICAD batteries for diesel locomotive starting are coming into ever-increasing use because of their outstanding reliability and economy. Call NICAD. Representatives in principal cities.

**For more information about NICAD diesel locomotive starting batteries, request Bulletin 175 from NICAD Div., Gould-National Batteries, Inc., Easthampton, Mass.**

NICAD
TRADEMARK

***NICKEL CADMIUM ALKALINE STORAGE BATTERIES***

**For some things you need a specialist!**

SEATRAIN's salesmen are all rate specialists who can give you **heavyweight** service at **lightweight** cost.

SEATRAIN transports your cargo in any type of rail car between the ports of New York, Savannah, New Orleans and Texas City.

SEAMOBILE provides highway container pickup and delivery service between New York-New Orleans or New York-Texas City.

***Your booking is guaranteed.***

**SEAMOBILE**
**SEATRAIN LINES** *Inc.*

Offices in Boston · Savannah
New Orleans · Houston · Dallas

711 Third Ave., New York 17, N.Y.

## Shippers' Guide

### Baltimore & Ohio

*. . . New "Tofcee" Trailers*

Has received 100 additional 35-ft flat-bed trailers, to bring its total flat-bed trailer "Tofcee" fleet to 200 units.

*. . . New Freight Service*

Through use of a demountable trailer body system, has established a new fast freight service between the New York-New Jersey-Philadelphia area and East St. Louis. The bodies, 36 ft long with capacity of 2,200 cu ft, will be carried on a fleet of specially-equipped 41-ft flat cars built at the B&O's Washington, Ind., shops. The service will be expanded to include the B&O's wheeled-trailer service now in effect between 18 base cities.

### Chesapeake & Ohio

*. . . Car Line Changes*

Has inaugurated direct LCL merchandise car lines from Grand Rapids, Mich., to Allentown, Pa. (LV) and from Richmond, Va., to Esmont (triweekly).

Has discontinued direct LCL car lines from Ashland, Ky., to Mullens, W. Va. (N&W); from Grand Rapids to Bethlehem, Pa. (LV); and from Louisville, Ky., to Rocky Mount, N. C. (ACL).

### Illinois Central

*. . . Freight Schedules*

Has reissued in pamphlet form its condensed dispatch freight schedules. Copies are available from C. A. Larsen, general freight traffic manager, Chicago.

### Lackawanna

*. . . Freight Schedules*

Has issued new list of symbol freight train schedules and major connections.

### Louisville & Nashville

*. . . Amends Routing Tariff*

Is amending (effective April 4) its Routing Tariff GFO 231-C, ICC A-16634, to apply only in connection with rates applying to traffic on which both origin and destination are reached via L&N. On and after April 4, this routing tariff will have no application to rates governing movement of traffic handled in interline service unless both origin and destination are reached by L&N.

### Santa Fe

*. . . Freight Schedules*

Has issued a new folder showing fast freight schedules to be in effect until Dec. 31, 1960. Copies are available from any Santa Fe traffic office.

**Signode Steel Strapping Co.**
*. . . Carloading Check Chart*

To assist shipping room and loading dock personnel in cleaning, drape-strapping and loading box cars, Signode is offering a Freight Carloading Check Chart for Wall Anchored, Free Floating and Controlled Floating Loads. Free copies are available from Signode Steel Strapping Co., 2600 North Western Ave., Chicago 47.

---

## HOW SHIPPERS CAN CUT L&D

(*Continued from page 70*)

multiple-wall bags and paperboard boxes, gets a strong endorsement from H. F. Klocker, general traffic manager of Monsanto Chemical Co., St. Louis, which developed the product. Monsanto, he says, has been getting "very favorable results" by using it to "lock" bags and boxes in place during transit (see p. 54).

Mr. Zollar likes "floating loads."

T. C. Brand, traffic manager for the Chicago Tribune, thinks big shippers might get beneficial results from "bunching" traffic that is particularly subject to rough handling damage. The Tribune, he writes, finds that damage to its newsprint is "less prevalent when it moves in blocks of from 15 to 25 carloads per day. Apparently road and yard crews then become aware of the presence of traffic that cannot take rough handling, and exercise more care."

Mr. Brand also stresses the importance of "carefully distinguishing" between damage "traceable to the carrier and damage that might have been caused in loading. Inclusion of the latter not only worsens the record, but eliminates the possibility of calling upon the shipper for corrective action."

The Poll as a whole produced no "magic formula" for prevention of loss and damage. It's pretty well summed up, however, by these final comments. From Hood River, Ore., R. G. Scearce, traffic manager of the Apple Growers Association, says: "If cars are loaded according to recommended practices, and containers are proper for the commodity packed, and proper equipment is furnished, then shipments are delivered in good order" . . . *unless* "negligence or lack of supervision" intervenes. W. J. Edmonds, GTM, Granite City (Ill.) Steel Co., thinks "a better understanding of causes of damage by both shipper and carrier will improve specific cases. Continued study by both parties will improve the overall situation." "Let's insist," adds Mr. Hope, "on corrective action wherever deficiencies are found."

**SPECIAL OFFER to Railway Age Readers**

**The 1960 PLANT LOCATION is just off the press!**

**33 1/3% discount on all orders received before May 1**

This annual encyclopedia comprehensively covers the basic factors in industrial development on a state-by-state basis.

Nowhere else will you find such a wealth of data on:

- Personal Income
- Labor and Manufacturing
- Industrial Development
- Transportation
- Power and Fuel
- Taxes and Labor Laws
- Finance
- Raw Materials
- Climate

In one year PLANT LOCATION has become the *primary source book* for industrial site seekers.

A typical comment: **"IT'S TERRIFIC.** It just happened to come at a time that we are selecting a new site and it has been of great value and is in daily use."

— J. C. Cleaver, President, CLEAVER-BROOKS CO.

**Order your copy—*now***

**PLANT LOCATION—Simmons-Boardman Publishing Corp.**
**30 Church St., New York 7, N. Y.**

Name _____

Company _____

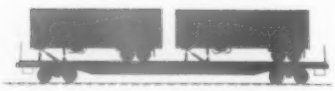
Address _____

City, State _____

_____ No. of Copies  Amount Enclosed $_____

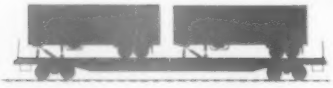
# What's What in Piggyback

## Plan I: Railroads and motor common carriers



*PLAN I—Railroads carry trailers owned by motor common carriers, on a "division" of the truck rate*—actually in practice a flat charge per trailer based on weight and distance, regardless of commodity. The trucker solicits and bills all freight at truck rates; takes trailers to, and picks them up from, railroad piggyback terminals; and performs any required road-haul before or after the rail movement. The railroad has no direct contact with the shipper, and simply substitutes for the trucker on part or all of the total road-haul.

## Plan II: A railroad operation, door-to-door

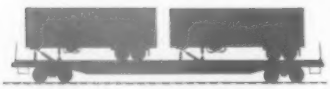


*PLAN II—Railroads carry their own trailers, under their own truck-competitive tariffs.* Under this all-rail plan, the railroad deals directly with shippers; furnishes all equipment; and provides pick-up and delivery between shipper plants and rail terminals, either by railroad-owned tractors or by contract with local draymen. P&D is usually confined to established territories contiguous to rail terminals.

## Plan III: Shipper trailers, rail cars

*PLAN III—Railroads carry trailers owned or leased by shippers, at a flat rate per mile.* The shipper delivers trailers to railhead; the railroad puts them aboard flat cars, ties them down, transports them to destination and grounds them; the shipper picks them up at the rail terminal.

## Plan IV: Shipper trailers, shipper cars



*PLAN IV—Railroads carry trailers owned or leased by shippers on flat cars also owned or leased by shippers, at a flat charge per car,* whether trailers are loaded or empty. The shipper takes his trailers to and from the rail terminal, and loads and unloads cars. The railroad performs terminal-to-terminal line-haul movement only.

## Plan V: Joint rates, truck-rail-truck

*PLAN V—Railroads carry their own trailers, or common-carrier truck trailers, under joint rail-truck rates on an end-to-end basis.* Operationally, Plan V is similar to Plan I, but is a true joint operation, which, in effect, extends the territory of each participating carrier into that served by the other; permits each participant to handle shipments originating in or destined to the other's territory; and allows each to sell for the other. Normally, this plan involves a truck road-haul on one or both ends of the rail movement.

# MARKET OUTLOOK *at a glance*

## Carloadings Rise 3.8% Above Previous Week's

Loadings of revenue freight in the week ended March 19 totaled 581,477 cars, the Association of American Railroads announced on March 24. This was an increase of 21,247 cars, or 3.8%, compared with the previous week; a decrease of 22,408 cars, or 3.7%, compared with the corresponding week last year; and an increase of 48,480 cars, or 9.1%, compared with the equivalent 1958 week.

Loadings of revenue freight for the week ended March 12 totaled 560,230 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, March 12

| District | 1960 | 1959 | 1958 |
|---|---|---|---|
| Eastern | 89,045 | 90,401 | 85,121 |
| Allegheny | 106,427 | 111,283 | 94,706 |
| Pocahontas | 44,975 | 49,410 | 47,096 |
| Southern | 101,539 | 114,323 | 108,345 |
| Northwestern | 61,417 | 65,105 | 59,850 |
| Central Western | 108,843 | 115,793 | 98,661 |
| Southwestern | 47,984 | 49,865 | 45,348 |
| Total Western Districts | 218,244 | 230,763 | 203,859 |
| Total All Roads | 560,230 | 596,180 | 539,127 |
| Commodities: | | | |
| Grain and grain products | 46,721 | 52,413 | 48,138 |
| Livestock | 4,455 | 4,552 | 4,657 |
| Coal | 101,201 | 102,112 | 103,883 |
| Coke | 12,104 | 10,692 | 6,045 |
| Forest Products | 37,688 | 39,029 | 33,399 |
| Ore | 18,939 | 18,049 | 14,689 |
| Merchandise l.c.l. | 37,846 | 43,655 | 48,595 |
| Miscellaneous | 301,276 | 325,678 | 279,721 |
| March 12 | 560,230 | 596,180 | 539,127 |
| March 5 | 557,607 | 595,475 | 544,374 |
| Feb. 27 | 553,153 | 575,334 | 551,192 |
| Feb. 20 | 571,625 | 583,741 | 494,919 |
| Feb. 13 | 580,103 | 567,188 | 533,186 |
| Cumulative total, 10 weeks | 5,797,162 | 5,758,884 | 5,439,507 |

**PIGGYBACK CARLOADINGS.**—U. S. piggyback loadings for the week ended March 12 totaled 11,075 cars, compared with 7,709 for the corresponding 1959 week. Loadings for 1960 up to March 12 totaled 101,218 cars, compared with 69,223 for the corresponding period of 1959.

**IN CANADA.**—Carloadings for the seven-day period ended March 7 totaled 64,993 cars, compared with 76,790 for the previous eight-day period, according to the Dominion Bureau of Statistics.

| | Revenue Cars Loaded | Total Cars Rec'd from Connections |
|---|---|---|
| Totals for Canada | | |
| March 7, 1960 | 64,993 | 29,436 |
| March 7, 1959 | 66,429 | 30,041 |
| Cumulative Totals | | |
| March 7, 1960 | 609,604 | 281,299 |
| March 7, 1959 | 610,712 | 257,569 |

# New Equipment

**PIGGYBACK**

► *Trailer Train Co.*—Ordered 500 85-ft roller-bearing piggyback flat cars—400 from ACF, 100 from Pullman-Standard. This brings to 1,500 the number of new cars ordered by Trailer Train since August 1959 (RA, Aug. 17, 1959, p. 27; Dec. 14, 1959, p. 37). As of last week 700 of the 1,500 cars had been delivered. When delivery is completed in May, Trailer Train will have a fleet of 4,159 cars.

**LOCOMOTIVES**

► *Nickel Plate.*—Ordered 15 1,800-hp diesel-electric locomotives for May-June delivery. Electro-Motive Division will build 10 units; Alco Products, Inc., will build five.

► *Santa Fe.*—Ordered 25 2,000-hp GP-20 road-switchers from Electro-Motive Division to replace 1,350-hp units scheduled to be retired. Deliveries will begin in May.

# Maintenance Expenditures

► *Down 1.8% in January.*—Expenditures by Class I roads for maintenance of equipment, way and structures in January were down about $4,400,000, compared to the same month in 1959, according to report of ICC Bureau of Transport Economics summarized below:

| | January 1960 | January 1959 | % Change |
|---|---|---|---|
| Maintenance of Way and Structures | $ 92,554,846 | $ 97,556,634 | —5.1 |
| Maintenance of Equipment | 151,030,599 | 150,407,972 | +0.4 |
| Totals | 243,585,445 | 247,964,606 | —1.8 |

# New Facilities

► *Canadian Pacific (Western Lines).*—Major 1960 projects include start of a two-year program to construct additional yard track facilities at Winnipeg, Man., at a first-year cost of $470,000; and construction of new yard offices and installation of additional shop tracks and new yard communications system at Vancouver and Coquitlam, B.C., at a cost of $223,000. Continuing projects include installation of CTC over 44 miles of the Swift Current subdivision, $870,000; and over parts of the Mountain and Shuswap subdivisions between Greely and Taft, B.C., $326,000. CP will also continue work on relining of spiral tunnels, with 800 ft of timber programmed for replacement with concrete in No. 1 tunnel, Laggan subdivision, at a cost of $258,000.

► *Central of Georgia.*—Ordered CTC equipment from Union Switch & Signal—Division of WABCo. for an extension of CTC in the Trammells-Norris Jct., Ala., territory. A 2½-ft style C addition will be made to an existing style C machine. The 49-mile territory will be controlled from Sylacauga, Ala.

► *Delaware & Hudson.*—Will improve its Mechanicville Yards at a cost of $310,000. Project includes extension of present tracks, rearrangement of 4,250 ft of tracks and installation of 4,750 ft of new track. A 1,000-ft roadway will also be built to facilitate handling by highway repair truck freight cars requiring light repairs.

a RAILWAY AGE time-saver page

*Try* **B&O TOFCEE**

Get complete platform to platform service that's based on proved B&O dependability. TOFCEE offers speedy service to many communities *on* B&O *lines*—reaches *into 22 states* and the District of Columbia. New B&O . . . DOT . . . service provides reports on trailer movement 24 hours a day. You win with TOFCEE, in every way!

TRAILER B&O TOFCEE FREIGHT SERVICE ON FLAT CAR ®

GEORGE E. DOVE
Manager Railroad Trailer Service
Baltimore 1, Md.
Phone LExington 9-0400

B&O BALTIMORE & OHIO RAILROAD
Constantly *doing things*—better!

# Industrial Traffic

**Jack N. Schumann** has been appointed traffic manager for **Virtue Brothers Manufacturing Co.**, Inglewood, Calif. Previously, Mr. Schumann was assistant to general traffic manager for Hunt Foods & Industries, Inc., of Fullerton, Calif.

**Edson E. Baldwin** has been appointed director of traffic and warehousing of the **Campana Corp.**, Batavia, Ill.

**Parker A. Thompson**, assistant traffic manager, has been appointed traffic manager, Construction department, **Merritt-Chapman & Scott Corp.**, New York.

**Frank E. Lawless**, rate and research analyst, general traffic department, **Masonite Corp.**, Chicago, has been appointed division traffic manager in Ukiah, Calif.

**E. I. DuPont de Nemours & Co.** will establish on April 1 a Development division to carry out broad transportation studies relating to the movement of raw materials, intermediates and finished products. **Gilbert P. Church**, special assistant, Engineering department, will be transferred to the Traffic department to head the new division. **E. Clarke Solomon**, manager, Trucking division, and **Roland W. Puder**, supervisor, Engineering Service division, will assist Mr. Church. Purchase and lease of tank cars and other specialized railroad equipment, now handled by the Traffic department, will be transferred to the Purchasing department April 1. Car operating and maintenance work will be combined in a railroad section with **Robert T. Robinson** as manager. **Byron H. LaMotte**, car maintenance and repairs manager, will succeed Mr. Solomon. **John D. Flagg**, control manager, will become traffic manager in charge of the rate, trucking, railroad, marine and insurance and claims sections. **Robert A. Francis** will succeed Mr. Flagg. **John C. Boos** named manager of the marine section.

The following appointments have been made in the Traffic department of **Westinghouse Electric Corp.**: **Mark J. Cushing**, traffic representative, Atomic Power department, Forest Hills, Pittsburgh, Pa.; **Ralph L. Ritter**, traffic manager, Lamp division, Bloomfield, N.J.; **John J. Murphy**, traffic supervisor, TV-Radio division, Metuchen, N.J.; **Dean Miltimore**, traffic supervisor, Appliance division, Columbus, Ohio; **Francis R. Mullin**, traffic supervisor, Lighting division, Vicksburg, Miss.; and **John A. Power**, traffic representative, Lighting division, Cleveland, Ohio.

**Homer E. Schuchman** has joined **Ribe & Co.** as freight rate analyst, Pipe & Fittings Rate department, Birmingham, Ala. Mr. Schuchman was formerly with the general traffic department of the Diamond Alkali Co., Cleveland.

**Robert E. Keith** has been appointed director of traffic for the **Colgate-Palmolive Co.**, New York, succeeding **Robert E. Crowley**, retired. Mr. Keith was formerly manager of traffic for the Toilet Articles division.

The **J. P. Lewis Co.**, Beaver Falls, N.Y., and the **Smith-Lee Co.**, Oneida, N.Y., have formed a Centralized Traffic department to be located at the latter company on or about April 1. **A. J. Bartholomew**, traffic manager, J. P. Lewis Co., will head the new department as director of transportation and distribution, with responsibility for the J. P. Lewis Co., Brownville Board Co., Smith-Lee Co., Milwaukee Lace Paper Co. and Sanitary Products Corp. of America.

# People in the News

**ARKANSAS & LOUISIANA MISSOURI.**—**J. W. Keller,** assistant to president, Monroe, La., appointed executive vice president. **W. R. Laing,** general manager, promoted to vice president and general manager. **L. L. Bennett,** assistant general auditor, named secretary-treasurer and auditor. **Travis Davis** appointed traffic manager. **E. L. Roberson** named general freight agent. **Wallace Nelson,** vice president and traffic manager, **John V. Willis,** secretary-treasurer and general auditor, and **Deloy G. Dowell,** general agent, retire March 31.

**CENTRAL OF GEORGIA.**—**A. O. Fredeman,** eastern traffic agent, New York, promoted to eastern traffic manager, succeeding the late **Alan Browning. J. A. Dowling,** general agent, New York, succeeds Mr. Fredeman. **L. J. Hamilton,** commercial agent, succeeds Mr. Dowling.

**CHESAPEAKE & OHIO.**—**B. A. Cumbee,** manager of stores, Cleveland, Ohio, transferred to Huntington, W. Va.

**CHICAGO & NORTH WESTERN.**—**A. F. Mason** appointed manager—real estate leases. **H. E. Nordgren** named assistant general land agent.

**LOUISVILLE & NASHVILLE.**—**Alfred James, Jr.** appointed assistant director of industrial development, Louisville, Ky. **S. A. Brownlie** appointed superintendent, Knoxville and Atlanta division, at Knoxville, Tenn., succeeding Mr. James. **W. R. Hadley,** trainmaster, Latonia, Ky., succeeds Mr. Brownlie as assistant superintendent, Knoxville and Atlanta division.

**MILWAUKEE.**—**Hilmer M. Larson,** assistant general passenger agent, Minneapolis, retires March 31. **Oliver R. Anderson,** assistant to freight traffic manager, sales and service, Chicago, appointed general passenger agent there, to replace **Robert F. Johnston,** who died Feb. 16.

**MISSOURI-KANSAS-TEXAS.**—**E. H. Thaine,** sales manager, New York, appointed regional sales manager there, a new position, with jurisdiction over sales offices located at New York, Boston, Buffalo, Cleveland, Philadelphia, Pittsburgh and Winston-Salem. **A. H. Younger,** sales manager, Louisville, Ky., succeeds Mr. Thaine. **W. H. Wiley,** sales manager, Houston, Tex., named regional sales manager there, a new position, with supervision over sales offices in Houston, Dallas, El Paso, Fort Worth, Galveston, San Antonio, Waco and Wichita Falls (Tex.) and Mexico City (Mexico). **O. B. Puckett,** sales manager, Waco, Tex., succeeds Mr. Wiley. **Clyde Kahlert,** sales representative, St. Louis, replaces Mr. Younger. **W. F. Roten,** sales representative, Waco, succeeds Mr. Puckett.

**NORFOLK & WESTERN.**—The name of the Magazine and Advertising department has been changed to the Public Relations and Advertising department. The N&W magazine will continue to be edited in the Public Relations section of this department.

**SEABOARD.**—**J. L. McBride,** division engineer, Jacksonville, Fla., named assistant superintendent, Virginia division, Richmond, Va., succeeding **Roy E. Kaan,** transferred to Tampa, Fla., to replace **James E. Crosby,** retired. **T. R. Buck** promoted to commerce attorney, Richmond.

**UNION PACIFIC.**—**John D. Glover** appointed general traffic agent, Atlanta, Ga., succeeding **P. S. Smith,** who retires March 31. **Samuel H. Henry** named general traffic agent, Birmingham, Ala.

**WABASH.**—**Al Toroian** appointed manager public relations, St. Louis, Mo.

## Supply Trade

**James A. Burt** has been appointed manager of railroad sales for **Aluminum Company of America.** Since joining Alcoa in 1953, Mr. Burt has been a sales engineer, and specialty salesman of castings and forgings, at the Cleveland district sales office.

**Gordon W. Sabold** has been appointed assistant manager, disc brake sales, Railway division, **Budd Co.,** Chicago. Mr. Sabold was formerly regional sales manager, western area, Railway division. **David H. Cushwa** has been transferred from the Railway division engineering department to contract administration, sales department, Philadelphia.

**Joseph W. Rice,** formerly public relations manager of **ACF Industries, Inc.,** has been appointed director of public relations of **Crane Co.** at Chicago.

**L. B. Foster Co.** has established a new office, yard and warehouse at 4050 W. 119th street, next to Lindale Station, Cleveland, Ohio. **Andrew M. Filak** heads the new office.

**D. W. Knudtson** has been promoted to vice president of **Lewis Bolt & Nut Co.,** Minneapolis.

**F. B. Steele,** Chicago district manager, **Gould-National Batteries, Inc.,** has been appointed Chicago regional manager. Mr. Steele will direct sales and field engineering in the states of Illinois, Wisconsin, Minnesota, Iowa, North and South Dakota and northern Indiana.

**John L. Marsh** has resigned as vice president of the **Ansonia Wire & Cable Co.,** Ashton, R.I., to form his own sales company, to be known as **John L. Marsh & Associates,** with temporary offices in the Barnett National Bank, Jacksonville, Fla. Mr. Marsh will represent Ansonia in the Southeast.

**Harold H. Dice,** assistant general manager,

James A. Burt

Gordon W. Sabold

has been elected general manager of the Allison division of **General Motors Corp.**

**Curry E. Ford** has been named director of marketing for **National Carbon Co., Division of Union Carbide Corp.,** New York.

**Walter H. Wiewel,** senior vice president of **Crucible Steel Co. of America,** has retired from that position but will continue as a consultant.

## OBITUARY

**Ralph W. Payne,** chairman of the board, **Ralph W. Payne Co.,** Washington, D.C., died March 6 at La Jolla, Cal.

**George H. Hanes,** 76, retired assistant general freight agent, **Rock Island,** died March 16 at his home in Chicago.

**James W. Jeans,** 57, superintendent of transportation and protective service, **American Refrigerator Transit Co.,** died March 17 in Missouri Pacific Hospital, St. Louis.

## Dividends Declared

**AKRON, CANTON & YOUNGSTOWN.**—40¢, payable April 15 to holders of record April 1.

**BANGOR & AROOSTOOK.**—20¢, quarterly, payable March 31 to holders of record March 14.

**BEECH CREEK.**—50¢, quarterly, payable April 1 to holders of record March 15.

**BOSTON & ALBANY.**—$2, payable March 31 to holders of record March 16.

**CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.**—37½¢, quarterly, payable April 21, July 21, Oct. 20 and Dec. 15 to holders of record April 1, July 1, Sept. 30 and Nov. 25, respectively.

**CHICAGO, ROCK ISLAND & PACIFIC.**—40¢, quarterly, payable March 31 to holders of record March 24.

**KALAMAZOO, ALLEGAN & GRAND RAPIDS.**—$2.90, semiannual, payable April 1 to holders of record March 15.

**MAHONING COAL.**—$7.50, payable April 1 to holders of record March 28.

**MISSOURI PACIFIC.**—Class A, 60¢, quarterly, payable April 1 to holders of record March 21.

**RICHMOND, FREDERICKSBURG & POTOMAC.**—dividend obligation, $1, quarterly; voting common, $1, quarterly, both payable April 1 to holders of record March 18.

**SEABOARD AIR LINE.**—50¢, quarterly, paid March 25 to holders of record March 14.

**SOUTHERN.**—M. & O. stock trust, $2, payable April 1 to holders of record March 15.

**SOUTHERN PACIFIC.**—28¢, quarterly, paid March 21, to holders of record Feb. 29.

**TEXAS & PACIFIC.**—common, $1, reduced; 5% preferred, $1.25, quarterly, both payable March 31 to holders of record March 24.

**UNION PACIFIC.**—4% preferred, 20¢, semiannual, payable April 1 to holders of record March 7.

**UNITED NEW JERSEY RAILROAD & CANAL.**—$2.50, quarterly, payable July 10 to holders of record June 20.

**WESTERN MARYLAND.**—common, 45¢, quarterly; 7% preferred, 70¢, quarterly; 3% preferred, 15¢, quarterly; 4% preferred, 40¢, quarterly, all payable March 30 to holders of record March 17.

### Index to Volume 147

**The index to the latest volume of Railway Age, July-December, 1959, is ready for distribution, and copies may be had by those subscribers desiring them. Requests should be addressed to the Circulation Department, Railway Age. Emmett Street, Bristol, Conn. Subscribers who have in previous years made application for the index need not apply again. They will continue to receive it as long as they continue to subscribe.**

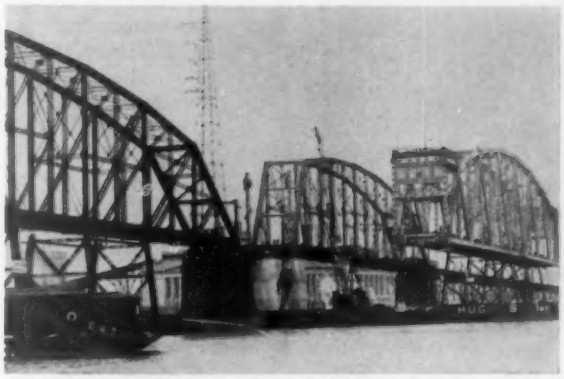
**1895-1960:** For 65 years, the PRR has used its Delair Bridge to link its main line with yards in Camden, N.J., and with routes to Atlantic City and the Jersey shore. The bridge handles 10 freight and 11 passenger trains daily. Electrified for PRR operations, it also carries a power transmission line across the river for Philadelphia Electric Co. and New Jersey's Public Service Electric and Gas Co.

# Tidepower Positions New PRR

**3:30 p.m. March 16:** Floated out on two barges at high tide, the old 533-ft fixed span heads upriver to a dismantling yard. Three tugs guide the float through the Tacony-Palmyra drawbridge, 2½ miles upriver from Delair Bridge.

**5:00 a.m. March 19:** With the new span held in place by four tugboats at peak high tide, the span is seated on new shoes already installed on piers. Working under floodlights, bridge crews tie the new span down as the tide ebbs.

**November 1956:** U.S. Army Corps of Engineers began dredging a new 40-ft channel for ocean shipping. The 120-ft opening was too narrow for 98-ft beams of ore carriers.



**March 16, 1960:** New 542-ft span, erected on four barges next to the old bridge and ready for floating into place, is the largest such project ever for American Bridge.

# Span: Elapsed time, 4 days

**Noon, March 19:** With falsework removed, the shape of the new channel is clear. Lift towers will be added later.

# You Ought To Know...

**Railroads and coal producers** cooperated in 1959 "to a degree never previously paralleled in efforts to meet competitive situations for the retention and expansion of business," says the Consolidation Coal Co. in its annual report. Cited by Consol as mainly responsible were 1958 amendments to the Interstate Commerce Act that gave the roads more rate-making freedom. Also praised by the coal company: "the fine performance of the railroads" in preventing a serious car shortage following the steel strike.

**Railroad workers out-earn** trucking employees by a comfortable margin. Average annual earnings of employees of highway trucking and warehousing firms in 1958, according to the American Trucking Associations, was $5,468. Average railroad wages the same year: $5,865. In 1959 average railroad wages rose to $6,110; trucking wages for the same period haven't been figured.

A **36.9% increase** in revenue resulted from reduced round-trip 30-day coach fares put into effect in May 1959 on the B&O's Baltimore-Washington-St. Louis line. The B&O has established similar reduced fares on the Baltimore-Washington-Chicago-Cleveland-Detroit line.

A **better 1960**—but still a far from satisfactory one—is anticipated by the Pennsylvania. For one thing, the passenger deficit has been declining since 1956, when it was $50,000,000 (by 1959, it was down to $37,700,000). For another, consolidated earnings last year were $16,654,454, or $1.26 a share, compared with 1958's $11,758,419, or $.89 a share. And, says Chairman James M. Symes, "the outlook for the long pull is encouraging."

**Katy's program to decentralize** and strengthen its field sales forces moved ahead last week, with creation of new regional sales offices in New York and Houston. The New York office will have jurisdiction over operations in seven eastern cities. The Houston office will supervise activities of eight offices in Texas and one in Mexico City.

**Post-snow storm ads** are reminding the public that the railroads are faithful friends. Two examples: The B&M asked its riders, "Will you love us in June the way you do today?" The Southern featured an ad showing a train plowing through the snow with a caption reading, "Here comes your **air** mail (and your highway mail, too)."

**Reduced excursion fares** from several Mississippi River cities to St. Louis are being offered by the Burlington between March 25 and May 28. The experimental rates, designed to meet highway competition and stimulate rail travel, will be almost 50% lower than normal round-trip rates.

**Piggyback is booming** in South Africa. South African Railways now has 253 TOFC trailers in service, has just ordered an additional 100 to meet rising demands. Piggybacking of highway tank trailers loaded with gasoline and other liquids is South Africa's latest TOFC wrinkle.

**Last operation** of steam power on the Grand Trunk Western was scheduled for March 27—a special fan trip from Detroit to Durand, Mich. GTW, now fully dieselized, was to an Alco-built 4-8-4 on the last run.

**Journal lubricators** had been applied to 887,020, or 49.9%, of the 1,776,174 railroad-owned revenue freight cars as of Dec. 31, 1959. On this date, 111,089, or 40.3%, of the 275,406 revenue cars under private car ownership were so equipped. Both classifications total 998,109 cars, or 48.6%, of 2,051,580 cars.

**Diversification of operations** may be reflected in a change of corporate name for Standard Railway Equipment Manufacturing Co. The proposed new name—Stanray Corp.—has been approved by directors, will be voted on by shareholders March 28. The "Standard Railway Equipment" name would be preserved in the designation of the company's Hammond, Ind., division.

**Two 75,000-gal. fuel storage tanks** have been moved three miles by the PRR in Chicago. Two wreck derricks installed on either end of a 63-ft flat car picked up each tank and swung it clear of obstacles en route. It took two hours and 45 minutes to move each of the 24-ft by 25-ft tanks, thus increasing the storage capacity of PRR's 59th street yard from 60,000 gal. to 210,000 gal.

## Gross Ton-Miles Per Train-Hour*: 1959's Top 15

| | |
|---|---|
| Cincinnati, New Orleans & Texas Pacific | 99,608 |
| Kansas City Southern | 98,683 |
| Richmond, Fredericksburg & Potomac | 96,444 |
| Union Pacific | 88,263 |
| Norfolk & Western** | 87,868 |
| Duluth, Missabe & Iron Range | 79,709 |
| Texas & Pacific | 76,312 |
| Santa Fe (including GC&SF and P&SF) | 76,153 |
| Chesapeake & Ohio | 75,882 |
| Gulf, Mobile & Ohio | 75,855 |
| Western Pacific | 75,363 |
| Texas & New Orleans | 75,122 |
| Louisiana & Arkansas | 75,109 |
| Wabash | 73,175 |
| Erie | 71,486 |

*Excludes locomotives and tenders.
**Includes operations of Virginian, merged into N&W Dec. 1, 1959.
(For full details, see pp. 68 and 69.)

## Advertisers' Index


Archer-Daniels-Midland Co. ..... 55
Association of American Railroads ..... 64
Atlantic Coast Line Railroad ..... 39

Baltimore & Ohio Railroad ..... 76
Bethlehem Steel Co. ..... 3

Cardwell-Westinghouse Co. ..... 62
Chesapeake & Ohio Co. ..... 28-29
Chicago, Burlington & Quincy Railroad ..... 42
Chicago Northwestern Railway ..... 53

Denver Rio Grande Western Railroad ..... 12

Erie Railroad Co. ..... 48

Foster Co., L. B. ..... 81

General Railway Signal Co. ..... 44-45
General Steel Castings Corp. ..... 11
Gould-National Batteries Inc., Nicad Division ..... 71
Great Northern Railway Co. ..... 67
Griffin Wheel Co. ..... 31

Hunt Co., Robert W. ..... 81

Iron & Steel Products, Inc. ..... 81

Louisville & Nashville Railroad ..... 61

Mobay Chemical Co. ..... 35
Monsanto Chemical Co. ..... 20-21

Nalco Chemical Co. ..... 91
North American Car Corp. ..... Inside Front Cover
Northern Pacific Railroad Co. ..... 32-33

Okonite Co. ..... Inside Back Cover

Peoria & Pekin Union Railway Co. ..... 70
Pullman-Standard Division of Pullman, Inc. ..... 26-27
Pure Carbonic Co. Division Air Reduction Co., Inc. ..... 57

Rail-Trailer Co. ..... 8
Railway Educational Bureau ..... 81

St. Louis-San Francisco Railroad ..... 40
Santa Fe Railway ..... 65
Seaboard Air Line Railroad ..... 58
Seatrain Lines, Inc. ..... 72
Servo Corp. of America ..... 22-23
Sparton Railway Equipment Division Sparton Corp. ..... 25
Southern Pacific Co. ..... 50-51
Southern Railway System ..... 36-37
Standard Car Truck Co. ..... Back Cover
Striegel Supply & Equipment Corp. ..... 81

Texas & Pacific Railway ..... 63
Toledo, Peoria & Western Railroad ..... 46

Union Pacific Railroad ..... 56
Union Switch & Signal Division of Westinghouse Air Brake Co. ..... 4
U.S. Rubber Co. ..... 13-16 incl.

Waugh Equipment Co. ..... 6
Weiss Company, B. M. ..... 81
Westinghouse Air Brake Co. ..... 59


## CLASSIFIED ADVERTISEMENTS


**FOR SALE**
**railway equipment**
**Used—As Is—Reconditioned**

Special Offerings
30 — Used, All-Steel
30-Cubic Yard, 50-Ton Capacity
MAGOR AIR DUMP CARS
Excellent Condition — Immediate Delivery

RAILROAD TRACK SCALE
1—125-Ton, 52'6", Buffalo Scale Co.

Service-Tested
Freight Car Repair Parts
For All Types of Cars

Railway Tank Cars and Storage Tanks
6,000- 8,000- and 10,000-gallon
Cleaned and Tested

**IRON & STEEL PRODUCTS, INC.**
"ANYTHING containing IRON or STEEL"

General 13486 So. Brainard Ave.
Office Chicago 33, Illinois
Phone: Mitchell 6-1212

Room 1608, 51C East 42nd St.
New York New York 17, New York
Office Phone: YUkon 6-4766

**SALESMEN WANTED**

Excellent opportunity available for a sales engineer between the ages of 25 and 40 to sell and service specialized chemicals to railroads. Weed control experience desirable. This position offers top potential for advancement within a growth company and an unusual employee benefit program, including annual cash bonus, profit sharing stock plan, and life and health insurance. Send replies to: Personnel Department, Nalco Chemical Company, 6216 W. 66th Place, Chicago 38, Illinois.

TECHNICAL TRAINING
FOR
RAILROAD MEN
Electrical and Mechanical
Maintenance of Diesel Locomotives
Diesel
Locomotive Operation
Car Work
and Car Inspection
Railway Signaling
THE RAILWAY EDUCATIONAL BUREAU
1809 CAPITOL AVENUE
OMAHA 2, NEBRASKA

Robert W. Hunt Company
*ENGINEERS*
Inspection—Tests—Consultation
All Railway Equipment
General Offices:
810 S. Clinton Street
CHICAGO 7
All Principal Cities

**For Railroad Executives with PROFITS as their Motive**

Do your operations require a transportation officer who is cost-conscious . . . has proven record of bringing forth real economies . . . has effected efficiency-producing innovations . . . has genuine interest in requirements of shippers and consignees . . . who promotes safety . . . with fifteen years of practical and theoretical transportation experience?
If you can offer a challenging position to a young man with the above qualifications, full consideration will be given to your inquiry. Box 328, Railway Age, 79 West Monroe Street, Chicago 3, Illinois.

**FOR SALE**

Baldwin Diesel Electric 120 Ton, 1000 H.P. Switcher. Rebuilt 1953 less than 2000 hrs. since rebuilt. Bargain Price. STRIEGEL SUPPLY & EQUIPMENT CORP., 307 Jack Street, Baltimore 25, Maryland. Phone ELGIN 5-7922.

**SALE OR RENT**

1—45 Ton G.E. D.E. Loco.
1—65 Ton Porter D.E. Loco.
1—Betts-Bridgeford Axle Lathe
B. M. Weiss Company
Girard Trust Bldg.
Philadelphia 2, Pa.

KEEP
BUYING
U.S.
SAVINGS
BONDS

"FASTER FROM FOSTER"
RAIL
& ALL
TRACK EQUIPMENT
Nation's Largest Warehouse Stocks
L. B. FOSTER CO.
PITTSBURGH 30 • ATLANTA 8 • NEW YORK 7
CHICAGO 4 • HOUSTON 2 • LOS ANGELES 5

# 'Let's Not Get Well Too Fast'

The chaotic state of the federal government's dealing with transportation is a problem the Administration in Washington expects to bequeath to its successors. The Commerce Department's report to the President on "Federal Transportation Policy and Program" (RA, Mar. 21, p. 31) has all the appearance of a document that was competent and realistic, to begin with, but which suffered considerable political mayhem before it was released to the public.

The evidence of competence in the report as originally written is to be found in its basic recommendations—which are comprehensive and perceptive. Complete equality in taxation and self-support for all forms of transportation is envisioned, and specific means of attaining this equality are recommended.

So far, so good. But, then, in comes politics. The sound policy of "diversification" by railroads is frowned upon—without a shred of supporting evidence. Railroads are said to be "the outstanding unsubsidized 'sick man' of transportation." Nevertheless, for heaven's sake (says the report, in effect) let's not cure the sick man too quickly. Users of government-built facilities should pay full costs—but only "in the long run." Deregulate the common carriers—but, please, not just yet; drag out the process "over an extended period."

The Commerce Department's report soundly advocates "general revision of traditional rate structures to bring them more closely into accord with cost structures. Rates should be rational, based on cost studies and market facts. . . ." But Commerce Secretary Mueller sees no reason for early action. "Since rates are a crucial factor in the competitive struggle, changes should be slow," says the Secretary. "Otherwise, sudden large diversions of traffic might produce chaos in many transport markets."

•

We have just been looking at some railroad loadings figures on a particular commodity, which indicate that this tonnage is currently forsaking the railroads at the rate of about 50% a year. The chief executive of a road serving an important steel-producing area tells us that steel production in this area is currently up 5% over 1957, but his road's steel tonnage is running 17% *below* 1957. Other roads could make similar reports.

The Administration just can't get excited about the railroads, no matter what happens to them. It has employed competent people to study the situation and make recommendations, and they have done so—in the "Cabinet Committee Report" of 1955, and, now, in the current report. But the Administration did not implement the 1955 report with a program of prompt and vigorous action; and it is giving no such support to the current report. By contrast, the Administration has not been slow-motion at all in promoting the Seaway, and in highway and airport expansion.

•

We commend to Secretary Mueller's attention a report prepared by the Bell Telephone System for internal use within the company, and entitled "Profit, Performance and Progress—a Study of Regulated and Non-Regulated Industry." The report compares a number of regulated and unregulated industries—textiles, steel, office machines, meat packing, retail sales, electrical equipment and appliances, airlines, railroads and electric power. In general, it finds that progress in these industries has varied with their profitability. The railroads, as the least profitable of the industries examined, are reported as showing the least improvement.

Some of the specific criticisms of current railroad status and performance, in the Bell System report, we believe, are questionable. Nevertheless, there's no doubt whatever that railroad service would be better, on the average, and probably less costly, today—if regulation and other adverse political policies had not singled railroads out for excessive persecution. The Bell report, in our opinion, makes pessimistic observations about the railroads as a whole which are applicable to only a part of the industry. Nevertheless, even the most successful companies are far less profitable than they ought to be, in the public interest.

If the railroads are in a fix even half as bad as that portrayed in the Bell System report, then their situation is one calling for immediate remedial attention. As good citizens—far better informed than most—what do Bell System executives think of Secretary Mueller's policy of "gradualism" in dealing with transportation?

**Automatic Classification Yard in action.** One of the Burlington's new box cars moves down the Cicero Yard hump and through the master retarder. Okonite cables guard all signal circuits against the dangers and expenses of "chain-reaction" jam-ups caused by equipment failure.

# Burlington protects its investment in automation

## *with reliable, service-proved Okonite cables*

Ever heavier investments in electronic equipment prove that the nation's railroads are turning to automation as the answer to increasing traffic demands and spiralling costs.

Look at the Burlington's new Cicero Yard. Automatic computing and control allow it to handle 3000 cars a day . . . twice the previous total . . . at savings of 3½ hours per car. Car and lading damage have been curtailed by 85%. Realizing that "automation is no better than the circuits that serve it", Burlington's Chief Signal Engineer, A. L. Essman, installed Okonite cables for all power, switch, retarder and interlocking circuits in the yard.

Like the Burlington, Class I railroads throughout the country have seen Okonite cables prove their reliability in service along their own lines. And, like the Burlington, too, they are insuring maximum reliability for their automated systems by specifying Okonite for the vital circuits that serve them.

There are four basic reasons why Okonite cables offer this service-proved reliability.

1. **Engineering experience,** built on co-operation with railroad engineers, assures cable constructions designed to give longer life in each specific application.
2. **Quality materials** purchased under Research-developed specifications are used in service-proved formulas and operations to assure a uniform, premium product.
3. **Manufacturing skill** in all known insulating methods, developed over 80 years, combines with the most modern equipment and controls to give the **right** cable for your circuit.
4. **Quality control and testing** programs that lead the industry add positive proof that you receive the **full value** of the Okonite cable designed for your operation.

For detailed information, technical data and dimensions on all types of Okonite railroad cables write for Bulletin RA-1078.

THE OKONITE COMPANY
Subsidiary of Kennecott Copper Corporation
Passaic, New Jersey

6205-A

*where there's electrical power . . . there's* **OKONITE CABLE**

PRI MEMBER

6481

# CLEVITE

## means

## Quality

Actual operating and laboratory tests have proved that superior performance is inherent in the Clevite cartridge bearing. It has withstood severe weather and over-the-road tests under the most rigorous conditions. Clevite represents the best thinking of many leading mechanical engineers plus the 40 years' experience of the largest and best known sleeve bearing manufacturer. Quality and a national service organization are its heritage.

**Standard**
CAR TRUCK COMPANY

BARBER

*Manufacturer of*
BARBER Stabilized Trucks
and center sill Cushion Tubes
*Distributor of*
CLEVITE Cartridge Bearings

**332 South Michigan Avenue, Chicago 4, Illinois** • **Canada: Consolidated Equipment Co., Ltd., Montreal 2**

9305